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ABSTRACT

The report analyzes manpower supply and demand in special education from a programmatic viewpoint. Data are reported from interviews with personnel preparation officials in the 50 states, Guam, Puerto Rico, The Bureau of Indian Affairs, and the District of Columbia. Background information is briefly summarized for each state in terms of economic, political, and educational trends as well as in terms of the status of special education teacher certification (categorical vs. noncategorical). Supply and demand findings are presented for each state and for the nation as a whole. A subsequent chapter details the effects of those manpower figures and of the economic conditions on quality of services to handicapped children (including information on students with mild to moderate and low incidence handicaps). The responses of inservice education to issues of quality, quantity, and equity in special education are discussed in terms of target participants, content, and delivery. Concerns voiced about preservice education are also considered. The effects of state budgetary actions on inservice training and of P.L. 94-142, The Education For All Handicapped Children Act, on preservice training are examined via state summaries. The final chapter draws together the findings, noting trends in supply and demand, programmatic issues (such as student teacher ratios) and inservice and preservice programs. (CL)

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PERSONNEL TO EDUCATE THE HANDICAPPED IN AMERICA: Supply and Demand From a Programmatic Viewpoint

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Chapter 1
Introduction

The Problem

Efforts to determine the supply of and demand for teachers and other educational personnel have yielded more conjecture and confusion than consensus. Among the problems that apparently interfere with the accuracy and effectiveness of data-gathering are: a lack of timeliness; a failure to make information useful for solving problems that are identified; a lack of consideration for the multiple factors that underlie issues of supply and demand; the propensity of survey methods and techniques to produce conflicting evidence that can be used to support opposing policies; and the danger that reporting systems currently in use may actually obscure the true manpower situation.

The conventional approach to examining manpower levels is to count persons entering the profession or preparing to do so, and to compare these findings with current and projected open positions reported by employer consumers of these personnel. Even if this were an adequate means for manpower planning, time lags between collecting and disseminating these data interfere with their relevance, and the absence of continuous national or regional distribution of supply and demand projections makes it difficult to handle manpower information in practical ways that would contribute to solving problems of over-supply or under-supply that might be identified.

Moreover, measurements and projections tend to exclude consideration of many internal and external factors that influence manpower issues: for example, working conditions and attrition; population trends and shifts; certification criteria and recruitment standards; personnel caseloads and instructional groupings; political, social, and economic fluctuations that influence not only career choices but also program growth or decline and public support; and a host of other fluid situational factors. In his review of seven major studies of teacher supply and demand, Roth (1981) acknowledged the confusion that also results from "a failure to distinguish among supply and demand data, method of collecting data, and technique used for projections" (p. 43). He also pointed out the variability of results reported by the studies, ranging from claims of significant surplus (Jones, 1981) to claims

of critical shortage (Association for School and College University Services, 1980).

Perhaps most serious is the danger that traditional manpower surveys obscure fundamental problems associated with school staffing. For example, it is entirely possible that a school district might report no vacant positions, even a surplus of available personnel, yet demonstrate a genuine need for manpower.

> Defining teacher demand in terms of personnel needed to meet or maintain the full educational opportunities goal for handicapped children is to determine need for personnel by establishing categories of service which should be available in any given school district. Historically, however, teacher demand is defined by number of vacancies filled or by unfilled positions for which a student population already exists. This approach is related to the level of services which the local school district is willing and able to maintain. (Illinois supply and demand for special education, 1981, p. 8)

The implication is that issues of quantity cannot be properly evaluated apart from the issues of quality and equity that permeate them. Further, it is at the juncture of quantitative and qualitative and distributive concerns that economic and social policy emerges to shape interpretations for decision making.

As an analogy, consider a family that has nothing to eat except a very large supply of potatoes. Depending on your point of view, your own food resources, and your knowledge of nutritional values, you might conclude that the family's supply of food is adequate because its members are able to have three large meals each day. Or, because there is food left over, you might conclude that the family is oversupplied. Then again, you might decide that the nutritional value of the family's diet is inadequate and that, despite an obvious surplus of edibles, there is in fact a need for more food of a different quality.

How do you decide and what do you do if there are no apparent nor immediate ways to change the status quo? Do you acknowledge that a problem exists but that it cannot be solved under current circumstances or by conventional means? Or do you make superficial gestures toward solution? Or do you deny the problem? And what further difficulties will ensue as a result of any of these decision options?

The Survey

This report and the survey on which it is based are not intended to solve all of these problems but, rather, to examine them in a different way, to shed new light so that avenues to

solution may become more clear. The manner in which information has been gathered and documented is not a model of scientific inquiry; it is an experiment in journalistic research. Our goal has been to study manpower supply and demand in special education from a programmatic viewpoint—to get beneath or beyond the numbers in order to find out how manpower issues might be manifested in programs and services for handicapped children in our schools, and to explore personnel preparation and deployment in terms of quantity, quality, and equity in public education.

The survey was conducted in the spring, summer, and fall of 1982 by a single interviewer who is the senior author of this report. A list of question areas (suggested by a review of documents by state and local education agencies and by the literature on teacher education) was prepared in advance as follows:

Sequence 1. Does your state have statutes or regulations governing student/teacher ratios in special education? What class loads or case loads are prescribed? What rationales or precedents were used in developing the student/teacher ratios that are used? Are there procedures whereby school districts may request waivers or exceptions to the student/teacher ratios? Is there any evidence that class loads or case loads are increasing? If so, what is the relationship between increased loads and economic constraints, policy decisions, personnel shortages or oversupplies, and other factors?

Sequence 2. Do colleges and universities in your state supply sufficient numbers of new special education personnel to meet current employment needs? If not, what are the major out-of-state sources of new personnel? What types of preservice preparation programs are present/absent at the higher education institutions in your state? What is the reason that some programs are missing? What concerns do you have about the quality of personnel preparation programs and/or about the skills of new personnel entering the profession from these programs?

Sequence 3. What are the special education areas in which there are personnel shortages in your state? What are the areas of over-supply? Have there been reductions in force in regular or special education in your state? If so, what have been the consequences of these on service delivery and staffing patterns? Is

preservice enrollment in your state increasing, decreasing, or holding steady? Is pupil enrollment in your state increasing, decreasing, or holding steady? How do all of these developments relate to economic constraints, policy decisions, personnel shortages and oversupplies, and other factors?

Sequence 4. If there are manpower shortages in your state, how do local districts deal with this in recruitment and staffing? Within your state, what is the extent of: cooperative arrangements among districts; contracts for specialized and other services; institutionalization of handicapped children; out-of-state placement of handicapped children; busing of handicapped children for education; placement of handicapped children in foster homes or similar domiciles for purposes of access to education?

Sequence 5. What is the certification pattern used in your state for special education personnel? How long has it been in place and how much does it fluctuate? Is there any perception that certification practices help/hinder the recruitment of adequate manpower? Is there any perception that certification practices help/hinder the quality of personnel preparation? What is your state's policy on provisional or emergency certification of special education personnel? What proportion of current positions are filled by personnel who are less than fully certified? What is required of provisionally certified personnel in terms of becoming fully certified?

Sequence 6. What movements and trends might be identified in the identification, placement of, and programming for handicapped students in the schools? To what extent are handicapped children educated in regular classrooms? What is the current status of child find and program expansion activities in the state?

Sequence 7. What inservice needs or priorities have been established regarding education for the handicapped in your state? How do these needs and priorities relate to preservice training, movements and trends in student placement and programming, manpower supply and demand, and other factors? What is the funding base for inservice education, and how is it provided? What is the status of the infusion of special education methods into the training of regular educators at both the preservice and inservice levels? How

do inservice needs and priorities relate to problems of provisional certification of personnel? Does state law on education for the handicapped contain any language that provides for professional development, personnel preparation, inservice, the Comprehensive System of Personnel Development, or any aspect of teacher education?

Sequence 8. What has been the impact of Public Law 94-142 and the federal funds on education of handicapped children in your state? What changes since 1976 might be attributed to the Law and the funds and the regulations?

Participant contributors (listed earlier) were selected on the basis of their involvement with manpower supply and demand issues, either through positions in state education agencies or through their participation in their state's Comprehensive System of Personnel Development, or both. In an initial telephone conversation with each participant, the purposes and methods of the survey were explained, question areas were reviewed, and arrangements were made for a lengthy telephone interview to take place on a specified date and time (although a few participants were interviewed in person). Actual interview time ranged from 50 minutes to 2 hours and, while each interview was structured to elicit responses to the specified question sequences, each was also open-ended so as to include discussion of additional relevant circumstances in a given state. A number of follow-up calls were made to clarify information or to gather additional data, and full use was made of extensive document collections forwarded by many participants (and listed in the appendix).

Responses were recorded as they were discussed in the interviews, then typed (with content descriptors) and transferred to index cards for sorting, tallying, and further organization. A draft of the findings was prepared in the spring of 1983 for review and revision by each participant, and their review comments have been incorporated into this final report. Therefore, although the survey took place in 1982, it has in some respects been updated to reflect more current conditions.

Consolidation of Terms

The survey on which this report is based included representation from the 50 states, Guam, Puerto Rico, the Bureau of Indian Affairs, and the District of Columbia. Guam and Puerto Rico are territories. The Bureau of Indian Affairs (BIA) is a federal agency. The District of Columbia is a school district which operates as a

state education agency, while Hawaii (one of the 50 states) is a state education agency as well as a single school district. For purposes of simplification, the 54 administrative/geographical entities will often be referred to as jurisdictions.

Jurisdictions do not use uniform terminology for handicapping conditions nor personnel categories. The major descriptors used in this report may not be the descriptors used by a given state but will, hopefully, subsume the various terms that may be in use. Abbreviations will appear in tabular displays.

ADM	Administrators, coordinators, supervisors, leadership personnel in local school districts
AUD	Audiologists
BIL	Bilingual special education
EC	Early childhood education; preschool
ED/BD	Mild to moderate emotional disturbance, behavior disorders, adjustment classes, behavioral impairment, emotional handicaps
G/T	Gifted and talented (The survey did not seek information on gifted and talented education but, rather, on education for the handicapped; occasional references to gifted and talented will appear.)
HH	Hearing handicap, hard of hearing, deaf, hearing impairment
LD	Learning disability, specific learning disability, severe learning disability
MR	Educable mental retardation, trainable mental retardation (mild to moderate); distinctions will be made where appropriate
MOB	Mobility training, orientation training
MULTI	Multiple handicaps, deaf-blind, rubella children (distinctions will be made where appropriate)
OT	Occupational therapist
PARA	Paraprofessional, educational aide, teacher's assistant
COHI	Crippled, physically handicapped, other health impaired
PT	Physical therapist
PSYCH	Psychologist, diagnostician, psychometrician
RES	Cross-categorical mildly handicapped groups, educationally handicapped, resource room teacher

SEC	Secondary education
SED	Severe emotional disturbance, primarily; indicating autism. (Although this handicap is classified under "Other Health Impaired" by the federal Special Education Programs, the autism category was of specific concern to participants in this survey.)
SPH	Low-incidence severely retarded (refers mainly to a severe level of handicap, although a profound level is sometimes also indicated)
SPCH	Speech and hearing; speech and language; communication disorder; speech impairment; language handicap; speech/language clinician; speech/hearing specialist; speech therapist; speech pathologist
VH	Visual handicap, blind, visual impairment
VOC	Vocational education, occupational education, career education, pre-vocational education

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Chapter 2

Background: The Larger Context

The present and future course of educational and other services for handicapped individuals is intimately related to parallel social, economic, and political attitudes and policies as they unfold nationally and within each state and district. These trends provide the background against which the contents of this report can best be understood.

Current Events: Across the Nation

A longitudinal study of selected school districts' responses to Public Law 94-142 (The Education of All Handicapped Children Act of 1975) has concluded that, although 1976-1979 was a period of successful adoption and implementation of the Law's provisions, expansion of special education programs and services had slowed dramatically by 1980, and school systems were struggling to maintain the status quo with fewer fiscal resources. With the 1981-82 school year, evidence began to indicate that recently expanded special education programs were being reduced, and that fiscal restraints had begun to overtake the effect of the Law as a stimulus to action (SRI International, 1982).

Public Law 94-142 has never been fully funded, nor has its funding history contributed more than approximately 8 percent of most states' budgets for education of the handicapped. The Reagan Administration's 1981 proposal to consolidate the 12 separate categorical programs that comprise the federal special education effort was abandoned, and the Part B formula funds (which flow directly to the states for implementation activities) have not yet suffered federal reductions. The discretionary programs, however, were reduced in 1981 and further reductions were proposed in the Administration's budget for fiscal 1982 and 1983. Among the vulnerable discretionary programs is that which supports the preparation of personnel for education of the handicapped.

Other federal education programs were combined into block grants in 1981 by the Education Consolidation and Improvement Act, which merged more than 30 such programs. Administration proposals called for a rescission of funds from the 1983 budget for the block grant program, as well as some reductions in the 1984 level of funding. Twenty-five states and the District of

Columbia stood to lose large amounts of federal money in 1983 under these block grants (Winners and losers, 1982). The effect of these and other cutbacks is to squeeze the educational resources available for all purposes in states and local districts.

As of January 1983, state budgets (which provide about 47 percent of the money for elementary and secondary education) anticipated deficits that may total more than $2 billion by the end of the year.

> Of 41 states that responded to a survey by the National Governors' Association and the National Association of State Budget Officers (in late 1982), only four had not adopted austerity measures in the wake of expected revenue losses that could total $8 billion (for those states) this year.
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> State revenues in the 41 states for the fiscal year 1983 are expected to amount of $137 billion, of $7.9 billion less than the state officers said last spring that they expected for the year. The causes of the budget problems, according to the groups' report—which it terms the "bleakest yet" of the nine it has done in recent years—include the nationwide recession, federal budget cuts, and a lower inflation rate.
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> The recession has not only reduced state revenues but has also increased the demand for many social services, such as unemployment compensation, the report said. The lower rate of inflation has reduced revenue from sales taxes. Furthermore, the report said, economic stagnation and the use of more fuel-efficient transportation has reduced fuel-tax revenues. (More education budget cuts sought, 1982, p. 6).

As state governments grapple with these setbacks, the spirit of New Federalism has stimulated interest in local control, made manifest in voter pressure to rescind tax bases that formerly had helped to support public education (for example, Proposition 13 in California; Proposition 2½ in Massachusetts), and accompanied by a public perception that the schools are not doing a good job. At the same time, litigation and pending legislation in various parts of the country target the financial disparities created between school districts when wealthy communities can provide higher salaries for teachers and better facilities for students, while state funds are not sufficient to correct the inequities.

Such inequities exist not only between districts, but increasingly between states and regions as changes in the economy continue. As unemployment reached 10 percent nationally in

1982 (and far surpassed that level in many areas of the country), there has developed what might be termed an "index of unrest" seen in fluctuations and movements in the general population. Residents from Michigan and other states are arriving in Texas in large numbers, while teachers laid off in New England and Michigan are applying in unprecedented numbers for positions in the Far West and Northwest. Conversely, job attrition is declining somewhat as uncertainty mounts in the job market.

The relative wealth and economic stability of individual states is also demonstrated in their expenditures for education. Within the range of average annual per-pupil expenditures are these 1981 examples (How the states ranked, 1982):

• Alaska	$ 4,669
• California	2,424
• South Dakota	1,884
• Arkansas	1,490
• Alabama	1,331

Within the range of average salaries for teachers are these (How the states ranked, 1982):

• Hawaii	$20,057
• Rhode Island	19,803
• Tennessee	14,073
• Mississippi	13,000

These and other phenomena impinge upon the quantitative and qualitative aspects of personnel supply and demand, and therefore upon the quality and continuity of public education, most particularly the equity of educational opportunity available to children across the United States.

Current Events: State by State

The following summaries of state economic, political, and educational trends have been gathered from reports in the press and other media, as well as from comments made by some participant contributors in the course of the study. This information demonstrates a nationwide fiscal crisis in 1982 that had not eased appreciably by mid-1983. "The economic recovery that is brightening the political horizon in Washington is casting only a chill light on state capitols. Tax increases and tax protests, budget squeezes, and program cutbacks are still the order of the day in most of the states" (Kurtz and Broder, 1983).

With each summary is shown the 1981-82 population of each state or territory, and the number of children aged 3 to 21 years of age served under Public Law 94-142 and Public Law 89-313 during

the 1981-82 school year. These data were reported on February 1, 1983, by the Data Analysis System of the U.S. Department of Education's Special Education Programs office. In a few cases, individual states have corrected these data in this report; where this has occurred, both the federal and state counts are shown.

Alabama **Population: 3,893,888**

By late 1982, Alabama's unemployment rate had risen to 14 percent, one of the highest in the nation. Most joblessness stems from slumps in the steel and automotive industries. The state's 1981 windfall from offshore oil leases is being spent for construction of roads, bridges, and school buildings. Though revenues declined, the state's 1982 budget of $1.8 billion could not be overspent. For special education, 1982 was the worst year in recent history. The state's 10-15 percent proration in special education funds was cut from money that school districts had already been allocated for their current year. One entire rural district announced that it would most probably have to close its schools, and other districts were contemplating similar decisions.

*Number of handicapped children served under PL 94-142 and PL 89-313 for 1981-82: 76,739

Alaska **Population: 3,893,888**

Alaska's budget for fiscal 1982 was $4.4 billion, and oil revenues made it possible for the state to give every resident $1,000 in a $400 million share-the-wealth program. Meanwhile, the jobless rate has lingered around 10 percent, and there has begun to be a tightening of the state flow of money to the schools. Among Alaska's 52 school districts, 21 are designated as state-operated schools under PL 89-313, making this the state that is most dependent on these funds, whose impact on rural special education and teacher inservice is significant.

*Number of handicapped children served, 1981-82: 11,007

Arizona **Population: 2,718,215**

A decline in state revenues prompted the governor to order spending cut by 10 percent in 1982. Many copper mines have closed, and others were laying off 600 to 800 people every six to eight weeks in 1982. In some communities, virtually no one was employed. In May 1982 alone, Arizona lost 10,000 jobs, and about 40 percent of these were in the copper industry.

*Number of handicapped children served, 1981-82: 52,137

Arkansas **Population: 2,286,435**

Declines in the automotive and construction industries brought Arkansas unemployment to over 9 percent in 1982. Early in the year, the state anticipated a $13 million shortfall, but subsequent budget cuts made it possible to end the fiscal year with a balanced budget of $1.69 billion. In Arkansas universities, faculty members whose salaries were already low have lost 22 percent in purchasing power (even with merit increases) because cost-of-living adjustments have not been permitted. The pullback in state funds has affected both higher education and public education.

*Number of handicapped children served, 1981-82: 49,863

Bureau of Indian Affairs

The Bureau of Indian Affairs is in the third year of implementing a weighted student unit formula for its education program. The exceptional education program provides for "add-on" funds for its identified handicapped population. The amount of add-on funds is based on the number of handicapped children served, the nature of the handicapping condition, and the amount of service provided. The ISEP base funding has not increased in real dollars over the three years and has decreased for the Office of Indian Education Programs as a whole. Budget reductions are due to school closures, declining enrollment, and transfer of schools to the public sector. These actions have not affected the exceptional education program. Any reduction of personnel (teachers, related services personnel) in BIA schools is due to isolation, federal hiring freezes, limits on full-time personnel, lack of available housing, undesirable locations, and competition from other school systems on or near the reservation. In the last three years, adequate funds have been available to meet the personnel needs for schools in the BIA system. At the local level (where Indian parents can choose to send their children to BIA schools or to public schools), there is a current public school effort to conserve funds. Some school districts are advising parents that services are being reduced and that they should shift their children from public enrollment to BIA school enrollment.

*Number of handicapped children served, 1981-82: 4,859 (Adjusted by the Bureau of Indian Affairs: 4,900)

California **Population: 23,667,902**

In 1982, unemployment approached 10 percent as layoffs in the automotive and timber industries continued, and California's deficit reached $1.5 billion. Early in 1983, the new governor proposed a plan to solve this deficit through cuts in conservation,

arts, energy, and other programs, as well as tuition increases in the university systems. On the positive side, the governor's proposal included a 5 percent increase in state assistance to public education. In California, the state supplies approximately 82 percent of all the money spent on public education, and Proposition 13 has practically eliminated property tax funds as revenues for education, which is under county administration. Having lost their taxing opportunities because of Proposition 13, some County School Offices are eliminating special education from their budgets and forcing their districts to take over these programs completely, a move that is expected to create fiscal and programmatic problems at the district level.

*Number of handicapped children served, 1981-82: 359,888

Colorado **Population: 2,899,964**

A mid-1982 unemployment level of 4.2 percent increased with the layoff of several thousand workers in the shutdown of the Colony Oil Shale Project and spinoffs from that shutdown. Although the state was expected to end fiscal 1982 with a surplus, cutbacks continue in public education and higher education, including a layoff of more than 40 faculty members at the University of Colorado. In his January 1983 state-of-the-state address, the governor stated that "there is something desperately wrong with our educational system," "too many teachers are rewarded for seniority rather than excellence," and "our public school system is not succeeding." Ways are already being explored to tighten the definitions of handicaps in order to reduce the numbers of children who can legitimately be served.

*Number of handicapped children served, 1981-82: 46,147

Connecticut **Population: 3,107,576**

Connecticut's 1982 budget deficit was expected to be $44 million. Approximately 1,200 state positions have been eliminated or left vacant, and other cutbacks have been made. As unemployment approached 8 percent, many communities dependent on auto-related business and the tire industry felt the crunch.

*Number of handicapped children served, 1981-82: 66,311

Delaware **Population: 594,338**

In a 1982 budget of $642 million, Delaware expected a surplus of $900,000. A two-cent increase in gasoline taxes to pay for highway repairs was the only tax increase of the year. Local districts, on the other hand, plan layoffs of school employees and others, and no state money is allocated for the professional

development of teachers. Problems in the steel and automotive industries contributed to an April 1982 unemployment level of 7.9 percent.

*Number of handicapped children served, 1981-82: 14,440

District of Columbia **Population: 638,333**

Budget problems affected many of the District's services in 1982, and the unemployment rate neared 10 percent. The District has always been at the mercy of the United States Congress, but recent surges in student progress and rising Scholastic Aptitude Test scores have helped to engage Congressional support. The District of Columbia has no legislative equivalent of a law for education of the handicapped, and its Board of Education is not part of the city's administrative structure but is separated from the mayor and his staff. The Mills decree, which centered on the District of Columbia school system, has underscored the importance of special education to policy makers in district government.

*Number of handicapped children served, 1981-82: 6,129

Florida **Population: 9,746,324**

Slumps in Florida's construction and phosphate industries contributed to unemployment that reached a high of 8.9 in early 1982. In Dade County, where 90 percent of the population is Spanish-speaking, all aid was stopped for refugees from the Cuban boat lift as of July 1, 1982. In his new budget for 1983, the governor has called for $3.4 billion for education, an increase of $350 million beyond the 1982 funding level. The increase would be paid for through tax increases, including the use of personal property tax hikes for public education. If approved by the legislature, the plan would raise teachers' salaries by an average of $4000 over the coming two years and would allocate $2.87 million for teacher inservice in science and mathematics education.

*Number of handicapped children served, 1981-82: 149,838

Georgia **Population: 5,463,105**

The state overspent its $3.4 billion 1982 budget by an estimated $40 million. In April 1982, unemployment claims filed for the month totaled 71,173. In 1981, Georgia identified more handicapped children for public education than New York and California combined, but in 1982 its legislature did an about-face in indicating that the child-find effort had gone far enough. In January 1983, the new governor approved a supplemental appropriations bill that would cut still more from state agency budgets that were deeply trimmed last fall by the outgoing governor.

While Georgia has for several years frozen new hires and salary increases, the new bill will also cut $7.8 million from the state education agency, and another pending proposal will probably bring the total cut to more than $9 million out of a $1.4 billion education budget.

*Number of handicapped children served, 1981-82: 115,779

Guam **Population: 105,979**

Guam is unusual in that federal funds support a full one-third of its special education program. Thus, any reduction in Part B funds from PL 94-142 would be disastrous. Yet in 1982 Guam did suffer a reduction in its Part B allocation because of the outdated census data used by the U.S. Department of Education to determine allocations. Subsequently, Guam has filed a complaint with the Department. Federal dollars have been used to develop and expand programs for handicapped students, and local dollars have supplemented this effort. Two years ago, however, local budgets became frozen and special education's progress has been influenced by this status quo situation.

*Number of handicapped children served, 1981-82: 2,123

Hawaii **Population: 964,691**

In fiscal 1980-81, Hawaii accrued a $231 million surplus; taxpayers received $100 refunds in 1982 and will receive $25 refunds in 1983. In mid-1982, unemployment had reached 6 percent due to declines in construction and sugar production, as well as layoffs in the hotel industry. The state is a single statewide school system. Federal funds account for less than 9 percent of the total expenditure for special education, and all remaining money comes from the legislature, with no local funding.

*Number of handicapped children served, 1981-82: 12,678

Idaho **Population: 943,935**

More than one-third of the state's employees went on four-day work weeks for seven weeks to diminish Idaho's fiscal 1982 deficit and many services were cut. Mining shutdowns and declines in the forest product industry shoved unemployment to 8.9 percent. The legislature's proposal to cut $7 million in state education funds was vetoed by the governor, who later proposed a revenue-sharing plan that would raise some $135 million to offset the deficit. Based on a sales tax increase, the proceeds of the plan would be divided equally between local governments (undermined by the "50-50" property tax exemption approved by voters in November) and education.

*Number of handicapped children served, 1981-82: 17,154

Illinois **Population: 11,426,518**

Unemployment reached 11 percent in 1982, with losses largely in farm and construction machinery. With the prospect of a $200 million shortfall in the state's 1983 budget of $14 billion, the governor cut $42.3 million from general operating funds for education in late 1982, reducing the education appropriation to $2.1 billion. In January 1983, the governor proposed $2 billion in tax increases as an alternative to as much as $800 million in further cuts for education and other services. This measure has been passed and will help to restore revenues to education in Illinois. Earlier, however, with a deficit of $89 million and a zero credit rating, the Chicago public schools pondered the Illinois statute that would have prohibited them from opening with a deficit in September 1983.

*Number of handicapped children served, 1981-82: 255,795

Indiana **Population: 5,490,224**

A shortfall of $85.3 million in revenues caused delays in payment of Indiana state income tax refunds, cancelled state employees' pay raises, caused other cutbacks, and raised university tuition. The weakened automobile and heavy manufacturing industries raised unemployment to 12.4 percent in April 1982. Indianapolis schools laid off 500 teachers last year, including approximately 85 special educators, and closed 10 elementary schools and one high school because of fiscal problems and declining enrollments. Nonetheless, the governor announced in early 1983 that he has joined the state superintendent of public instruction in a proposal to spend $12 million to promote excellence in Indiana's schools, with a primary focus on a computer education initiative.

*Number of handicapped children served, 1981-82: 97,647

Iowa **Population: 2,913,808**

Iowa ended its fiscal 1982 year with a surplus of $15 million and an unemployment rate of 9.9 percent. Highest unemployment is in the meatpacking and farm equipment areas. The 1983 budget of $1.8 billion is constitutionally out of balance, but the educational allocation is expected to include the 6.1 increase in per-pupil expenditure required by the state's funding formula.

*Number of handicapped children served, 1981-82: 56,894

Kansas **Population: 2,363,679**

Kansas ended fiscal 1982 with a balanced budget after using $50 million in reserve funds to meet the potential shortfall.

Unemployment remained at somewhat more than 5 percent. The state's allotment for reimbursement to schools held steady, and district special education programs are surviving.

*Number of handicapped children served, 1981-82: 42,544

Kentucky **Population: 3,660,777**

State spending was cut by almost $400 million in 1982, and a hiring freeze reduced state employment by nearly 2,500 jobs. Voters in Louisville rejected a county tax to raise $11 million for its public schools and prevent further school closings and teacher terminations. Kentucky ranks 50th among the states in percentage of high school graduates in its population.

*Number of handicapped children served, 1981-82: 72,057

Louisiana **Population: 4,205,900**

Increased revenues from taxes on oil and gas producers gave Louisiana a surplus for fiscal 1982. Because of a slowdown in these industries, however, a deficit is projected for fiscal 1983. Agency cutbacks include 1,500 state job eliminations. Unemployment in 1982 averaged 9 percent. There is a decline in public school enrollment and a mushrooming of private school enrollment. Louisiana has an historically high parochial school enrollment, but other factors also contribute. Baton Rouge, under a court desegregation order, has lost close to 4,000 students to other parishes, mainly to private schools.

*Number of handicapped children served, 1981-82: 81,879

Maine **Population: 1,124,660**

With unemployment at 9.3 percent in 1982, Maine is faring better than usual inasmuch as this is the first time it is not among the leading areas of unemployment. Paper companies are the state's major industry, and cutbacks have been felt here. State budget cuts are expected in 1983. The major problem is the tax-indexing referendum that was passed by voters in November 1982 with a retroactive provision. This is bad news because the state has spent those retroactive taxes and now will have to return $32 million to taxpayers over the next two years. From the accumulated $32 million shortfall, $15 million is targeted to come out of the education budget. Still, when the state was in a dire financial position in 1981, the legislature approved gifted/talented as a special education expenditure and also approved expanded efforts in preschool education for the handicapped.

*Number of handicapped children served, 1981-82: 25,947

Maryland **Population: 4,216,975**

Thousands have been laid off by Bethlehem Steel and General Motors in Maryland, but there is strong growth in high technology firms. A $61 million shortfall in the state budget is predicted for 1983, and there have been service cutbacks and personnel reductions. The Prince George's County school board laid off 900 employees, including 450 teachers, because of $31 million in losses resulting from property tax limitations. Baltimore's school system faced the prospect of losing $4.4 million in federal funds and accruing a $13.4 million shortfall for 1982-83, and massive reductions in force are anticipated.

*Number of handicapped children served, 1981-82: 93,296

Massachusetts **Population: 5,737,037**

Layoffs have diminished, but few new jobs are available, and unemployment approached 9 percent in 1982. Proposition 2½, approved by voters in November 1980, limited local property taxes and has led to a loss of fiscal autonomy experienced by school committees. As a result, local education expenditures decreased by $136 million in fiscal 1982, while state expenditures for other services increased by $28 million. More than 17,000 school positions were lost between 1980-81 and 1981-82, and 7,700 of these were teaching positions. Although the student population has declined somewhat, this decline is not in the proportions that would justify the magnitude of personnel reductions. For example, Fitchburg endured a 21-percent overall reduction in school staff; Walpole, 27 percent; Worcester, 23 percent; Quincy, 31 percent; and Pittsfield, 18 percent.

*Number of handicapped children served, 1981-82: 139,747

Michigan **Population: 9,262,078**

The economy is in a depression due to catastrophic setbacks in automobile and housing industries. The state work force was reduced by 10,000 jobs in an 18-month period, and unemployment passed 17 percent in 1982. While many Michigan residents are moving out of the state to the sun belt, Michigan retains one of the highest populations of migrant students in the United States, as well as large concentrations of Asian and Hispanic citizens. Detroit schools are particularly hard hit by the fiscal crunch, and projected a $60 million deficit for 1982-83. In January 1983, the governor froze more than $216 million in state aid to schools in an attempt to solve the severe financial crisis, and also delayed indefinitely $280 million earmarked for colleges, universities, and local governments. The reduction of educational

budgets is expected to continue. Special education programs operate on local millage, state funds, and federal funds. State and local education agencies are now operating under acting emergency rules, which relax restraints on caseload and age-span requirements.

*Number of handicapped children served, 1981-82: 154,061 (Adjusted by the Michigan Department of Education: 158,479)

Minnesota **Population: 4,075,970**

Minnesota faced a $1 billion revenue shortfall in fiscal 1982. Delays occurred in state payment of bills; a mental hospital was closed; and education funds were severely cut. Road use fees and an income tax surcharge were instituted, while unemployment approached 8 percent with greater job loss in the Iron Range and in farming areas. A state law, passed in December to help solve fiscal problems, reduced the paychecks of all government workers in the state by 2 percent—including the paychecks of some 50,000 teachers. Over the past two years, the state's previous reimbursement of 70 percent of school staff salaries has been decreased to 61 percent due to budget cuts and proration. The legislature has also suspended the supervisory rules for one year, during which directors and program supervisors will not be required, and during which the state education agency is to develop a proposal for alternatives to the supervisory rules.

*Number of handicapped children served, 1981-82: 77,916

Mississippi **Population: 2,520,638**

Mississippi eliminated 2,000 state positions and ended fiscal 1982 with a surplus, but no new programs can be initiated and no state salaries nor teacher salaries can be increased. The timber industry is in trouble, and unemployment in May 1982 was at 10 percent. Cutbacks in special education services have included the loss of two out of ten Learning Resource Centers (which are responsible for evaluation, testing, and consultation with the public schools) and the reduction of these Centers' staffs from more than 90 to 70.

*Number of handicapped children served, 1981-82: 49,456

Missouri **Population: 4,916,686**

In 1982, two state cutbacks were ordered in order to reduce spending by 10 percent so as to balance Missouri's $3.8 billion budget. The budget reductions have caused a decrease in the funds available for discretionary use, such as for personnel development in special education.

*Number of handicapped children served, 1981-82: 100,931

Montana **Population: 786,690**

Montana ended fiscal 1982 with a surplus from oil and gas severance taxes and additional income tax revenue. Smelting plants have closed in Butte, Anaconda, and Great Falls, and logging is suffering in the northwest. Unemployment approached 9 percent in mid-1982 and exceeded that level in mining and timber areas. The 1982 surplus may bring some fiscal relief to local governments.

*Number of handicapped children served, 1981-82: 14,279

Nebraska **Population: 1,569,825**

To reduce an estimated $50 million shortfall, Nebraska increased its sales tax, personal income tax, and cigarette tax in 1982. A hiring freeze has eliminated 1,000 state positions and deferred salary increases. University tuitions have been raised, while faculty merit raises have been minimized. Unemployment in 1982 approached 6 percent.

*Number of handicapped children served, 1981-82: 31,812

Nevada **Population: 800,493**

With the prospect of a $1.9 million shortfall by mid-1983, state government hiring and other expenditures were cut. Property taxes had been reduced in 1981 and, in the gaming-dependent economy of the state, the tax change made the budget vulnerable when the economy slowed. Higher education suffered funding cuts and lost faculty members. School districts continue to receive state funds on the basis of teachers employed, rather than numbers of children served.

*Number of handicapped children served, 1981-82: 12,456

New Hampshire **Population: 920,610**

New Hampshire has no sales nor income tax, and the repeal of the minimum business profits tax is being contemplated. To address the $31 million deficit, the state plans to triple the price of vanity license plates, close welfare offices, and similarly limit services. Personnel costs were cut 10 percent in 1981, and another 5 percent reduction is planned, while overall unemployment neared 9 percent. A court suit is pending concerning discrimination in an educational property tax levy which would create a discrepancy among districts in the amount taxed and spent for education. High technology firms prosper in the southern part of the state, where the incoming population is expanding.

*Number of handicapped children served, 1981-82: 14,179

New Jersey **Population: 7,364,823**

The state ended fiscal 1982 with a surplus gained by personnel cuts throughout the state payroll, as well as higher cigarette taxes. Unemployment reached 9.2 percent. Local districts have cut some services, and there has been a dramatic swing to local control. In terms of services for the handicapped, observers believe that a backlash is beginning as a result of fiscal constraints.

*Number of handicapped children served, 1981-82: 163,686

New Mexico **Population: 1,302,894**

New Mexico's 1982 fiscal year ended with a budget surplus, whereupon the state cut income taxes and gross receipts taxes and did away with the state property tax. Gasoline taxes and university taxes, meanwhile, have been raised, and 1982 unemployment reached nearly 8 percent. More people are moving to the state as the national economy worsens, and many of these are presumed to be former residents returning home; the pupil population in the schools is on the rise for this reason.

*Number of handicapped children served, 1981-82: 24,454 (Adjusted by the New Mexico Department of Education: 28,572)

New York **Population: 17,558,072**

The diversification of New York's economy has prevented unemployment from exceeding 8 percent. The state budget for fiscal 1982 was $27 billion, with a large proportion of this consumed in the New York City budget—but still not enough to prevent plans for laying off 4,400 city employees in 1982, most of them teachers and paraprofessionals. New York City also lost about $30 million in state funds because of child count errors in the numbers of handicapped children it serves. In early 1983, the U.S. Supreme Court refused to hear *Levittown vs. Nyquist*, and, thus, in effect deferred the issue of local finance of education to the language of the state constitution. The case in question charges that New York's dependency on property taxes for school funding creates a double standard in public education, wherein students in wealthy districts receive a better education than do students in less lucrative areas.

*Number of handicapped children served, 1981-82: 250,404

North Carolina **Population: 5,881,766**

Because of a 1982 shortfall of $60 million, the state froze hiring and cut services. Declines in textiles, construction, lumber, furniture manufacture, and electrical machinery production hit

state sales tax and income tax revenues, and unemployment was 8.7 percent by May 1982. Public schools were affected for the current school year by state cuts; all of the state's demonstration centers for special education inservice have been phased out due to state budget cuts; and in 1982 North Carolina lost half of its state funds for the training of all educators. However, thousands of write-in responses to the Governor's Year 2000 Program proposal indicate considerable public support for education.

*Number of handicapped children served, 1981-82: 120,041

North Dakota **Population: 652,717**

A 1982 budget shortfall arose from lower oil production and the attendant loss of oil production and extraction tax revenues. State agencies cut spending twice during fiscal 1982, and state employees lost scheduled pay increases. Unemployment in the summer of 1982 was 4.5 percent. Special education reported the need to stretch resource and personnel in the effort to deal with declining dollars.

*Number of handicapped children served, 1981-82: 10,212

Ohio **Population: 10,797,630**

With unemployment over 11 percent and a projected deficit of $528 million, Ohio's governor in January 1983 ordered a $190 million decrease in state financing of elementary and secondary education, as well as a $40 million cut to colleges and universities. School districts will have until the end of the fiscal year to deal with these reverses. Later the state senate passed a permanent 90-percent personal income tax increase, part of which will restore funds to Ohio's emergency loan fund for schools, which is in great demand as schools try to deal with the previous cuts. As population shifts take people out of the state, Ohio has lost two Congressional seats as well as 700,000 in student population over the past eight to nine years.

*Number of handicapped children served, 1981-82: 210,445

Oklahoma **Population: 3,025,290**

The state's fiscal 1982 surplus was created by the oil and gas boom. The 5.2 unemployment rate as of the summer of 1982 is increasing as oil growth slows and as layoffs accumulate in auto-related industries and construction. Authorities anticipate more restrictive definitions of handicaps to limit eligibility for services.

*Number of handicapped children served, 1981-82: 65,479

Oregon **Population: 2,633,105**

By May of 1982, Oregon had an 11.1 percent rate of joblessness. Nearly 40,000 sawmill workers were either without work or on shortened work weeks. Reduced income tax revenue brought about a $421 million shortfall for fiscal 1982, and remedies included cuts in aid to schools and state agencies, as well as six percent state payroll reductions. On March 31, 1982, 70 of Oregon's 320 districts held school elections, and eight out of ten did not approve their school budgets. In some districts, schools were closed until a reduced budget could be submitted.

*Number of handicapped children served, 1981-82: 45,278

Pennsylvania **Population: 11,863,895**

Pennsylvania eliminated 1,700 state jobs in fiscal 1982 and raised state college and university tuition rates. Tax revenues are declining, and the ailing steel industry contributed to an unemployment rate of 10.4 percent in May 1982. Under its strained budget, Philadelphia contemplates the elimination of 1,550 jobs, including those of more than 500 teachers and other professionals, as well as the abandonment of most extracurricular activities in elementary and junior high schools. State funding for special education peaked in 1979-80 and since then has been pulled back. If Pennsylvania institutes a new funding system, it is expected to impose a limit on special education costs (e.g., a moratorium on full implementation) and, with a lessened federal role, this paints a bleak picture for the mildly handicapped child in the regular classroom.

*Number of handicapped children served, 1981-82: 190,919

Puerto Rico **Population: 3,196,520**

For the past three years, public education in Puerto Rico has received more money from local budgets than from the central budget. Up to the moment, there has been adequate money to pay for teachers, but in some areas fiscal problems are affecting the provision of related services for handicapped students.

*Number of handicapped children served, 1981-82: 27,852

Rhode Island **Population: 947,154**

Unemployment rose to 9.9 percent by April of 1982, and a state revenue shortfall of $23 million brought about tax increases on gasoline and cigarettes. The legislature pared down its worker's compensation law, and, in an additional economy measure, 480 state workers were laid off. Special education services in Rhode

Island have been propelled by a 1974 class action suit that structured state functions and monitoring activities.

*Number of handicapped children served, 1981-82: 18,435

South Carolina **Population: 3,121,820**

The state ended fiscal 1982 with a balanced budget, but only after using money from its reserve fund, declaring across-the-board spending cuts, and laying off some state employees. Joblessness rose to 11.4 percent by the spring of 1982, and the textile industry continued to decline. As 1983 began, the state again faced a deficit, this time approaching $150 million. Education programs are operating at a $70 million deficit, and 3.1 percent cuts are expected in all programs.

*Number of handicapped children served, 1981-82: 69,476

South Dakota **Population: 690,768**

At the end of fiscal 1982, South Dakota showed a surplus in its budget. Unemployment was low at 4.5 percent. High interest rates and low prices damaged agriculture, but tourism has not declined. The state has no income tax but does collect a sales tax and property tax. Local districts are opposed to adding local property levies. General education fiscal aid is down to a state reimbursement of approximately 25 percent. Special education is funded after the fact, with reimbursement of 50 percent of allowable expenditures made. The Individual Education Plan becomes the special education program, and whatever it calls for becomes an allowable cost. Local districts spent $12 million in 1981 for educating handicapped children, and the state reimbursed half of allowable costs.

*Number of handicapped children served, 1981-82: 11,522

Tennessee **Population: 4,591,120**

By spring 1982, unemployment had reached 10.7 percent, and spending cuts had brought Tennessee's 1982 budget into balance. By early 1983, however, another shortfall of $4 million was anticipated, to be offset by cuts in funds set aside for higher education programs and for equipment and other expenses in state agencies. A possible tax increase could provide some relief for public education programs later in the year. A court order has required an October and February census of handicapped children in school, and the list of those inadequately served is stabilizing. Most of the state's handicapped students are assigned to resource rooms, apparently in response to a 1973 state mandate for special education which defined one group as

"learning problems." In 1981, however, the legislature took "learning problems" out of the state law.

*Number of handicapped children served, 1981-82: 102,459

Texas **Population: 14,229,191**

In 1982, Texas had a sufficient fiscal surplus to appropriate $55 million for state prisons and $134 million for college construction, and the personal property tax was abolished. Unemployment was 5.9 percent in the spring of 1982, and the slowdown in oil and gas drilling has also affected other industries. Funds for education have not increased and, in fact, the state's Comprehensive System of Personnel Development for special education manpower planning was in jeopardy for a time in 1982. At the same time, people continue to arrive from Michigan and other depressed areas because of the perceived job opportunities in Texas's major cities.

*Number of handicapped children served, 1981-82: 281,873

Utah **Population: 1,461,037**

Utah's budget surplus is expected to decrease as the recession lowers tax revenues. Problems in housing and the metals industry are factors in the 8 percent unemployment rate reported in mid-1982. There have been cutbacks in education budgets, and district applications to the state for Education for the Handicapped Act discretionary funds are seeking 100% reimbursement for teachers' salaries. The growth districts are struggling to maintain the services they have developed. Utah's population is increasing, and some communities are overflowing with arrivals from other states.

*Number of handicapped children served, 1981-82: 37,584

Vermont **Population: 511,456**

Ten-percent spending cuts balanced the 1982 budget. High technology firms are prospering, but other industries are in decline. Educational financing has shifted from the property tax to state income and sales tax support, both of which have been increased. As of July 1, 1982, a change in state rules moved Vermont from noncategorical to categorical identification of handicapped children. This change is expected to decrease the numbers of children for which special education is accountable in Vermont.

*Number of handicapped children served, 1981-82: 11,563

Virginia **Population: 5,346,818**

Spending cuts of $50 million to $75 million became effective July 1, 1982, because of shortfalls in income tax and sales tax

collections. The 7.2 percent unemployment rate in the summer of 1982 centered on the furniture and construction industries. In his 1983 address to the legislature, the governor cited a $305 million state deficit as his reason for recommending more than $100 million in education cuts during the 1982-84 biennium. He also proposed a freeze on capital expenditures for schools and a reduction of $11.1 million from the share of sales tax revenues that go to education.

*Number of handicapped children served, 1981-82: 99,571

Washington **Population: 4,132,156**

After cutting 20,000 jobs, raising university tuitions, and increasing taxes on various items, Washington's 1982 budget was still short by $253 million. Unemployment reached 12.4 percent in the spring of 1982, and setbacks were felt in the timber, nuclear, and aerospace industries. Local levies for education are expected to decline in 1983.

*Number of handicapped children served, 1981-82: 63,916

West Virginia **Population: 1,949,644**

A hiring and spending freeze is in effect, and in 1982 the governor ordered all state agencies to cut budgets by 10 percent to offset a $30 million deficit in the $1 billion budget. A further cut of 3 percent was made in November 1982. Unemployment is over 15 percent, industries are closing, and coal mines are operating under potential, all of which contribute to a decline in state revenues.

*Number of handicapped children served, 1981-82: 39,554

Wisconsin **Population: 4,705,767**

Wisconsin's 1982 deficit of more than $350 million was made up by increased sales taxes, corporate income taxes, and cigarette taxes, as well as university tuition increases and deferral of state employees' pay increases. By fall, the unemployment rate had climbed to 11.4 percent, thus reducing the tax base and creating a new cash flow problem in state coffers.

*Number of handicapped children served, 1981-82: 71,593

Wyoming **Population: 469,557**

The state developed nearly $100 million in budget surplus for fiscal 1982, largely through energy severance taxes and oil and gas revenues. Unemployment remained around 4 percent in 1982. There is no state income tax nor corporation tax, but there is a 3 percent sales tax. Reductions in the work force in the mining and

construction industries occurred in 1982, and by late in the year the oil industry had also begun to cut back. The overall effect has been that the influx of people pouring into the state to seek work has abated slightly.

*Number of handicapped children served, 1981-82: 10,844

Total number of children aged 3-21 served under Public Law 94-142 and Public Law 89-313, during school year 1981-82 (as reported by the Data Analysis System of the U.S. Department of Education's Special Education Programs—and including not only the states and territories encompassed by this survey, but also American Samoa, Northern Marianas, Trust Territories, and Virgin Islands) 4,233,282

By handicapping condition:

• Learning disabled	1,627,344
• Speech impaired	1,137,919
• Mentally retarded	802,264
• Emotionally disturbed	341,786
• Other health impaired	80,171
• Deaf and hard of hearing	76,387
• Multihandicapped	73,832
• Orthopedically impaired	59,958
• Visually handicapped	30,979
• Deaf and blind	2,642

Certification Summary

State certification practices represent an additional context for interpreting and understanding the manpower status of individual states and territories. Although certification standards (and departures from them) are discussed more fully in a later section of this report, an overview will help to clarify much of the information to follow.

Most states have a separate certification category for special education teachers, while a few certify all teachers in general education and include endorsements for special education personnel. In slightly more than half of the jurisdictions, certification is primarily categorical, which means that personnel are certified (and trained) to teach in a specific area of handicap. In the noncategorical model, teachers are typically certified according to the level of severity of the pupils they teach (for example, mildly handicapped, moderately handicapped, or severely handicapped).

Multicategorical or cross-categorical models certify personnel to teach in more than one handicapping area (for example, emotional disturbance, mental retardation, learning disabilities). The latter two models can include certification or endorsement specifically for resource room teachers.

Even when noncategorical or multicategorical approaches are taken, many jurisdictions have separate categorical certification for specialties in the sensory handicaps, severe handicaps, and other low-incidence populations. In addition, it is not unusual for certain specialist personnel, notably speech pathologists or speech therapists, to be certified apart from special education, and occupational therapists and physical therapists are universally certified separately.

The majority of states certify personnel for grades K (kindergarten) through 12. Kentucky does not offer K-12 certification but certifies at either the elementary or secondary level. Nine jurisdictions certify personnel for grades K-12 but also specify certification for the elementary or secondary schools: Colorado, the District of Columbia, Indiana, Iowa, Kansas, Louisiana, Missouri, Tennessee, and Wisconsin. West Virginia specifies a secondary certificate in addition to K-12, while Vermont awards a K-12 certificate, as well as a certificate in occupational/vocational special education at the secondary level.

For Bureau of Indian Affairs schools, certification varies according to the practices of the states in which these schools are located, and minimum standards have been set forth for personnel qualifications in Public Law 95-561. Among the 53 other jurisdictions identified for this survey, 27 operate with certification that is completely or primarily categorical. Those considered to be primarily categorical award certificates in a number of categorical areas, but also have one or two generalist endorsements or certification areas. A case in point is New Hampshire, which issues categorical certificates in such areas as learning disabilities, emotional disturbance, mental retardation, visual handicaps, acoustic handicaps, and physical handicaps, but also issues two noncategorical certificates: one in general special education (with bachelor's level training), and a new special education consulting teacher certificate (with graduate level training).

Completely or Primarily Categorical Certification (N = 27)

Alabama	Colorado	Georgia
Arizona	Delaware	Illinois
California	Florida	Indiana

Iowa	Missouri	Oregon
Kansas	Nevada	South Carolina
Maine	New Hampshire	Texas
Michigan	North Dakota	Virginia
Minnesota	Ohio	West Virginia
Mississippi	Oklahoma	Wisconsin

Certification policies in the remaining jurisdictions are completely or primarily noncategorical or multicategorical, with categorical certification reserved largely for personnel who serve low-incidence populations of handicapped students.

Completely or Primarily Noncategorical or Cross-Categorical Certification (N = 26)

Alaska	Certification in regular education, with endorsements in special education and specialization in: learning disabilities, mental retardation, physical handicaps, resource room, severe handicaps, visual handicaps, emotional disturbance, hearing handicaps. The state-noted specialization does not restrict the areas in which the certificate holder can work; it simply specifies the area of specialization in which the holder is trained. Although the certificate looks like categorical certification, it is in fact a comprehensive certificate.
Arkansas	Generic noncategorical certification in mildly handicapped and moderately-to-profoundly handicapped; categorical certification in speech, hearing, vision, and severe emotional disturbance.
Connecticut	A single certificate covers multiple categories, and categorical certificates cover specialty areas.
District of Columbia	Noncategorical certification, with categorical certification in low-incidence areas.
Guam	Noncategorical certification (mild handicaps, moderate handicaps, and severe handicaps).
Hawaii	Certification in special education, with specification of area of emphasis: generic (mental retardation and learning disabilities),

	hearing impairment, visual impairment, and other low-incidence handicaps. The overall special education certification allows personnel with a specific area of emphasis to teach in other specialty areas of special education, but this is not done unless manpower supplies in given areas are inadequate.
Idaho	Certification is in general special education, with categorical endorsements. The endorsements do not restrict the areas in which a person can work but specify the area of specialization in which a person is trained.
Kentucky	Multicategorical certification (educable mental retardation, learning disabilities, behavior disorders, and physical handicaps), with categorical certificates in severe handicaps and other low-incidence handicaps.
Louisiana	Has been categorical, but seven new certification areas are effective as of 1985: mildly and moderately handicapped; severely handicapped; hearing impaired; visually impaired; speech/language impaired; noncategorical preschool; gifted and talented.
Maryland	Noncategorical certification, except for categorical vision, speech, and severe handicaps.
Massachusetts	Generic multicategorical certification (mildly handicapped, moderately handicapped, and severely handicapped); generic early childhood certification.
Montana	Certification in general elementary or secondary education, with a noncategorical special education endorsement, and areas of emphasis in severely handicapped, developmental disabilities, and learning disabilities; the areas of emphasis indicate the training of the certificate holder.
Nebraska	Noncategorical certification, with specific endorsements for low-incidence handicaps, and for categories in mild handicaps at the master's level.

New Jersey	Generic multicategorical certification, with categorical certification in auditory impairment and visual impairment.
New Mexico	Certification in regular education, with categorical endorsements in special education and one generalist endorsement. The state operates special education programs according to four levels of severity of handicap, with the A level comprising more mildly handicapped students and the D level comprising the most severe educational handicaps.
New York	Noncategorical certification covering mental retardation, emotional disturbance, behavioral impairment, and learning disability; categorical certification in deafness, blindness, and speech impairment.
North Carolina	Cross-categorical certification (mildly handicapped), with categorical specialty certification in low-incidence areas, specific learning disabilities, speech and language, gifted and talented.
Pennsylvania	Noncategorical certification covering mental retardation, emotional disturbance, physical handicaps, behavioral impairments, learning disabilities; categorical certification in deafness, blindness, speech impairment.
Puerto Rico	Generic special education certification; a single certificate covers all categories.
Rhode Island	Noncategorical certification for mild, mild/moderate, and moderate/severe educational handicaps. Categorical certification in physical handicaps, visual impairment, hearing impairment, deaf-blind, and speech/language impairment.
South Dakota	Noncategorical certification, except for categorical speech/hearing.
Tennessee	Noncategorical certification covering learning disabilities, mental retardation, emotional disturbance, social maladjustment, gifted, multiple disabilities, crippling and special

	health conditions; and three categorical certifications for low-incidence handicaps (visual impairment, deafness, speech/language).
Utah	Generic multicategorical certification for resource room teachers (mildly and moderately handicapped); categorical certification for speech impairment and for deaf-blind. Separate certificate for severe handicaps.
Vermont	Noncategorical certification (mildly handicapped, moderately handicapped, and severely handicapped).
Washington	Certification in regular education, with noncategorical endorsement in mild/moderate handicaps, severe handicaps, and preschool.
Wyoming	Noncategorical certification, with categorical specialist endorsement in some areas.

Discussion

Until fairly late in the 1970's, the incidence of handicapped children and youth in need of special education services was estimated to be approximately 8 million. The most recently available figures (U.S. Department of Education, 1983), however, show that, as of 1981-82, only about 4¼ million students between the ages of 3 and 21 were being served under the provisions of Public Law 94-142 and Public Law 89-313 in the fifty states and territories. This discrepancy would indicate either that earlier incidence estimates were not correct (and if not, the reasons for the overestimate have never been fully advanced), or that all handicapped children have not yet been fully served, or both.

The decline in the growth of special education services beginning in 1980 (SRI International, 1982) does not bode well for the improvement and expansion of services for education of handicapped students, most particularly when considered in light of the serious fiscal problems experienced by nearly every state and, subsequently, by most school districts. At the same time, the spirit of the New Federalism favors turning over to states and districts autonomy in educational decisions at a time when fiscal constraints must clearly be overriding factors in local planning and implementation.

Variations in the states' fiscal statuses suggest comparable disparity in the funds that are, and will in the foreseeable future

be, available for human services. Variations in per-pupil expenditure and teacher salaries suggest further inequities.

Nor does current certification practice suggest consistency in educational service among jurisdictions. One gets the impression that some jurisdictions have elaborate certification systems that are in a continual state of revision. This appears to create a situation in which preservice programs cannot respond fast enough, inservice efforts cannot meet the needs adequately, personnel are perpetually underqualified or under pressure, pupils suffer, and little appears to take root.

Moreover, when regulations and requirements are in a continual state of flux, people may tend eventually to disregard them. Some resistance to new training requirements may be attributed to the pervasive feeling that the requirement will eventually be reversed. This "banana republic" climate may also be pervasive at the federal level, at which by now it appears that entire national policies will be reversed every few years. Too much and too frequent arbitrary change focuses on the present, and too little attention is devoted to future goals that can be trusted.

On the other hand, there are jurisdictions whose operations and certification systems are relatively streamlined and have been in place for some years. In these places, quite a bit appears to have taken root, and new developments can become part of an existing and trusted pattern. In short, as the respondent from one such state said, "We don't go crazy out here every time they say something in Washington." While such states have not solved all of their problems, they have solved some of them, and their relative stability has given them a past that can be logically extended into the future.

Under the fiscal conditions prevailing in 1982 and 1983, problems that may exist concerning the quantity and quality of personnel to educate handicapped students may not readily be solved. Even as various calls for excellence in education are issued, the means for improvement are diminishing. When budgets are limited, pressure builds on a school system if more children are identified as needing services, but procedural and instructional reorganizations that attempt to meet monetary crises may not lead to quality nor to equity. A first step toward greater educational effectiveness is the honest assessment of the status quo and the identification of the forces that mediate for and against school improvement. A second step is to develop the short and long term plan for improvement, and to determine the fiscal, human, and material resources that will be necessary, both quantitatively and qualitatively. When insufficient resources

limit the scope of what can be accomplished, many would agree that the priority should become personnel in sufficient numbers and with the depth and breadth of qualifications that can ensure instructional competence in the education of each student.

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Chapter 3

Supply and Demand

This chapter presents results of the survey that demonstrate levels of manpower supply and demand *with quantity as the criterion*. The purposes are:

- To show the availability of preservice preparation programs and the availability of new personnel produced by them;
- To report the status of preservice enrollment as compared with pupil enrollment;
- To outline overall personnel shortage and surplus clusters, as well as information on reductions in force and attrition from other causes; and
- To discuss factors related to the supply of and demand for personnel in special education.

The first several sections of Chapter 3 contain overall presentations, displays, and interpretations of these quantitative findings. The last section (Individual profiles) summarizes each jurisdiction's situation as it relates to manpower supply and demand. Review of the individual profiles in the aggregate will clarify quantitative problems on a national scale, while individual review will illuminate the tabular displays and their interpretations.

Chapter 4 of this report explores the effects of these quantitative findings on qualitative aspects of education for handicapped children and youth.

Missing Links in Preservice Programming

College or university programs to prepare personnel for all necessary positions do not exist in every state or territory. In some cases, the fact of missing links in preservice programming may contribute to problems of manpower supply and demand; in other cases, it may not. As an example, a jurisdiction with a miniscule pupil population of a certain type might not regard the absence of a preservice preparation program in that specialty as significant to the recruitment effort because the necessary personnel can be obtained from other sources and the need does not justify the establishment of a new program in higher education. On the other hand, a state with a large pupil population of the same type might regard the absence of a personnel preparation program as a serious omission that directly influences supply and demand.

It is equally true that the existence of one or more personnel preparation programs in a given specialty area may or may not be sufficient to a given jurisdiction's needs. In a very populous state, several programs training personnel for the same positions might not be sufficient to meet personnel needs for these positions. Moreover, programs to prepare personnel for educating low-incidence populations of handicapped students may not be necessary in each jurisdiction, as long as those that do exist can deploy graduates to multiple jurisdictions in adequate numbers.

A 1983 survey (Geiger, 1983) identified 698 higher education programs that were engaged in preparing personnel for special education; many of these are small programs and many are not comprehensive programs. Obviously, some jurisdictions have a large proportion of these programs, but this is no guarantee that the programs are adequate in and of themselves, nor that sufficient numbers are enrolling and graduating to meet the demand for new personnel. These are among the issues that state and territorial Comprehensive Systems of Personnel Development are intended to examine, in order that personnel preparation may be coordinated and organized in such a way as to eventually solve issues of manpower quantity and quality through training, retraining, and other means.

This survey has recorded the specific personnel preparation programs whose absence may influence manpower supply in the jurisdictions where they are noted. Not all jurisdictions have the specific endorsement titles used in this section of the report or on the display of missing preservice preparation programs (Table 1). When personnel certification is categorical, responses indicate the absence of training in the categorical areas shown. When another form of certification is used, responses indicate the absence of a specified training track among generic or other types of preparation programs. Some endorsement titles may also represent training for which positions are not cited in jurisdictional certification policies. For example, in the case of early childhood education for the handicapped (which is not mandated in each jurisdiction) responses on Table 1 indicate that early childhood education is provided but that no preparation program exists for that specialty.

Table 1 shows jurisdictions in which no programs are missing, and tallies missing programs for the remainder of the jurisdictions surveyed. Each of the latter responses means that no formal, organized training program or training track is operating within the geographical boundaries of the jurisdiction in question. (The boundaries of the District of Columbia are interpreted, for this purpose, as extending into Northern Virginia and suburban Maryland.)

Table 1. Preservice Programs Not Available Within a Jurisdiction

	Number Missing	NO VH	NO HH	NO OT	NO MULT	NO SED	NO SPH	NO MOB	NO BIL	NO COHI	NO PT	NO SPCH	NO VOC	NO ED/BD	NO EC	NO PSY
Alabama	1	VH														
Alaska	6	VH	HH			SED	SPH			COHI		SPCH		ED/BD		PSY
Arizona	2			OT									VOC			
Arkansas	1								BIL							
California	Has All															
Colorado	3				MULT		SPH		BIL							
Connecticut	3	VH	HH							COHI						
Delaware	4	VH	HH		MULT		SPH									
Florida	1											SPCH				
Georgia	2	VH			MULT											
Hawaii	2	VH	HH													
Idaho	6	VH		OT			SPH	MOB		COHI	PT					
Illinois	Has All															
Indiana	1	VH														
Iowa	3	VH	HH	OT												
Kansas	1	VH														
Kentucky	1					SED										
Louisiana	Has All															
Maine	2	VH	HH													
Maryland	Has All															
Massachusetts	Has All															
Michigan	Has All															
Minnesota	2					SED									EC	
Mississippi	1	VH														
Missouri	1	VH														
Montana	5	VH	HH	OT	MULT						PT					
Nebraska	5				MULT	SED		MOB	BIL	COHI						
Nevada	4	VH	HH		MULT	SED										
New Hampshire	9	VH	HH	OT	MULT	SED	SPH	MOB	BIL				VOC			
New Jersey	2						SPH								EC	
New Mexico	9	VH	HH	OT	MULT	SED	SPH	MOB	BIL	COHI						
New York	Has All															
North Carolina	Has All															
North Dakota	1															PSY
Ohio	1							MOB								
Oklahoma	1	VH														
Oregon	1													ED/BD		
Pennsylvania	1							MOB								
Rhode Island	2			OT							PT					
South Carolina	3	VH			MULT			MOB								
South Dakota	2			OT							PT					
Tennessee	1					SED										
Texas	1								BIL				VOC			
Utah	4	VH				SED			BIL	COHI						
Vermont	2	VH	HH													
Virginia	Has All															
Washington	Has All															
West Virginia	2	VH	HH													
Wisconsin	4	VH						MOB	BIL	COHI						
Wyoming	Has All															
Guam	3			OT	MULT		SPH									
Puerto Rico	3			OT			SPH					SPCH				
BIA																
Distr. of Columbia	Has All															
N =	(111)	23	12	10	10	9	9	8	8	7	4	3	3	2	2	2

Not applicable, but see narrative in Chapter 3 state profiles.

The Bureau of Indian Affairs had some relevant remarks concerning the availability of personnel preparation programs in relation to manpower for Indian schools. This information departs from the other information shown on Table 1 but is presented in narrative form in the individual profiles at the end of this chapter.

Tabulations give no indication of the number of training programs that might be essential in a given jurisdiction, nor of the adequacy of programs that exist, nor of the sufficiency of their graduate numbers. The data simply show where no programs currently exist.

The greatest lack of programming, that for the preparation of personnel in visual impairment, occurs in 23 jurisdictions. Expansion of personnel preparation programs in visual impairment and in hearing impairment (the second greatest omission) is thought to be limited by expense and by the relatively small service need for such personnel in public education. In the late 1970's, the absence of sufficient personnel preparation programs in the sensory handicaps came to light in the wake of very serious personnel shortages and, at that time, it was determined that there were very few doctoral-level professionals in the country who could in fact staff personnel preparation programs in these areas. Federal funds were directed to solve this doctoral shortage, but it is possible that the same problem continues to prevail. It is not feasible to suggest what an adequate number of programs might be; one would be sufficient if it produced the right number of new qualified personnel, and one hundred would be insufficient if they did not. Suffice it to say, as an example, that in Texas, with three teacher education programs in visual impairment, the shortages of these personnel are great.

Table 1 can also be misleading in terms of the supply of and demand for personnel in emotional disturbance/behavior disorders and severe emotional disturbance, including autism. Nine jurisdictions reported the absence of preservice training in severe emotional disturbance, while two reported the absence of training in emotional disturbance/behavior disorders. Yet, further information on manpower shortages will show a critical shortage of personnel to educate emotionally disturbed/behaviorally disordered personnel across the United States. This supports the assumption that the mere presence of one or more programs in a given specialty area is no guarantee of stability in manpower supply and demand. Indeed, the spokesperson from New Hampshire, for example, reported that the training program in emotional disturbance/behavior disorders in that state "couldn't even begin to meet the needs in New Hampshire."

Ten jurisdictions report no personnel preparation programs in multiple handicaps, and nine report none in severe handicaps. Among these, five jurisdictions report the absence of both such preservice programs (Colorado, Delaware, New Hampshire, New Mexico, and Guam). Since a major client group among the multiply handicapped are deaf-blind children and youth, it is useful to determine how the absence of personnel preparation in multiple handicaps relates to the absence or presence of preparation programs in other sensory handicaps. Among the ten jurisdictions with no preparation programs in multiple handicaps, five also report the absence of training in visual handicaps and hearing handicaps (Delaware, Montana, Nevada, New Hampshire, New Mexico), and two others report the absence of training in visual handicaps (Georgia and South Carolina).

The regional deployment of graduates to multiple jurisdictions as an alternative to the absence of state or territorial preservice training is not clear. For example, among the six New England states, four have no preparation programs in either visual handicaps or hearing handicaps. Within the larger southern area composed of Florida, Georgia, South Carolina, Louisiana, and Mississippi, three states have no preparation in visual handicaps and two have none in multiple handicaps. In the much larger expanse covered by the adjacent states of Montana, Idaho, Utah, and Nevada, there is no program in visual impairment, and only two in hearing impairment, two in multiple handicaps, and two in crippling conditions and other health impairments.

Also unclear is the preservice focus on secondary education for handicapped students. Although data in Table 1 do not address preparation for elementary or secondary special education (nor do most jurisdictional certification policies), information in other sections of this report will clarify supply and demand in this regard.

The Supply of New Graduates

The sufficiency of existing programs can be measured in part by the extent that the supply of new graduates they produce meets demand. Of the 54 jurisdictions reported here, only one stated that the supply of new graduates from its institutions of higher education should be sufficient to meet current and near-term demands for personnel, and one other jurisdiction stated that its own supply of new graduates in special education (but not related services) is sufficient for current needs but may not be adequate for anticipated needs.

Maryland has a full complement of training programs to match positions in special education and related services. The state anticipates no near-term problems in the supply of new graduates in special education because there are not going to be many new special education positions for the coming three years. The economy is not only holding back development, but has already caused some significant reductions in force.

Rhode Island must recruit occupational and physical therapists from outside the state but reports that its other personnel needs can probably be met with graduates from within the state. Rhode Island also reports, however, that when programming expands for secondary handicapped students in the public schools, this will probably become an area of personnel shortage.

Obviously, the absence of certain professional preparation programs would make it impossible for a state's recruitment needs to be satisfied with its own graduates. But Maryland is the single state among 12 with full-service personnel preparation programming to report a sufficiency of in-state graduates. In other jurisdictions, several factors relate to the production and supply of new graduates.

Regional and National Programs

On the positive side, the presence of regional preservice programs does make a difference, and some programs' graduates are recruited nationally. The programs to which jurisdictions in this survey most often seem to turn to recruit personnel are shown below. These are the colleges and universities mentioned repeatedly, and are not intended to represent each institution in the country that supplies personnel to multi-state areas.

- San Francisco State University, California: Sensory handicaps, multiple handicaps, severe retardation.
- Augustana College, South Dakota: Deaf education.
- University of Illinois, Champaign-Urbana: Various specialties.
- Northern Illinois State University, DeKalb: Severe handicaps, visual impairment.
- Gallaudet College, Washington, D.C.: Deaf education.
- Boston College, Massachusetts: Various specialties.
- University of Vermont, Burlington: Consulting teachers (Although the national demand for these graduates is great, the supply is relatively small.)

Regional programs alone, however, cannot correct supply/demand imbalances in all geographic areas. For example, Nebraska had difficulty recruiting graduates of regional programs

in visual handicaps, and the state department finally mounted a summer-only endorsement program, using instructors from other states. This program was crucial to the provision of adequate services in a rural state unable to hire teachers of visually handicapped students in the areas where they were most needed.

Supply and Demand Obscured by Certification Practices

Production of new graduates is reported to be uneven in some jurisdictions in that there are too many of some and not enough of others. However, certification practices that permit a K-12 special education teacher to serve a variety of handicapping conditions may blur such imbalances in the supply of new graduates, because large numbers prepared in one specialty for which demand is low may be assigned to positions in a different specialty where demand is high. Also contributing to uneven production is the inability of large universities to make changes in program direction rapidly enough to respond to changing needs in the classroom and marketplace.

Further, in states where dual certification requires teachers to be certified in regular education as well as special education, the numbers of people who actually take special education positions may be considerably different from the numbers who receive training.

Movement of New Graduates Across State Lines

Some jurisdictions report heavy losses of newly prepared personnel to neighboring states where salaries and other incentives are better, or where teacher education is more expensive than in the jurisdiction where they trained. Whereas this movement is well documented in a few instances, the lack of graduate follow-up in many jurisdictions makes the magnitude of this movement difficult to estimate.

For various reasons, a few geographic areas are populated with sizable numbers of out-of-state individuals who add a strong supplement to a manpower pool that can be deployed to the boundaries of the demand. In these cases, the availability of out-of-state personnel is programmed into manpower projections and recruitment activities. The three jurisdictions that best fit this description are the Territory of Guam, the District of Columbia, and the State of Hawaii.

Guam has access to numbers of teachers who are military dependents stationed there temporarily, and the size of the island makes it possible to deploy them to areas of need. The District of Columbia receives applications from many civil service

and military spouses, and its service area is small enough to deploy them throughout. Because of its attractiveness as a resort, Hawaii receives large numbers of applications from the mainland and, again, the deployment area is relatively limited.

Other jurisdictions with attractive locations cannot, however, benefit as well from out-of-state graduates because the service area extends far beyond the resort or metropolitan area in which applicants seek employment. A case in point is Santa Fe, New Mexico, which receives around 4,000 out-of-state applications per year from people who want to be in Santa Fe but who are reluctant to take positions in outlying areas of the state where the real demand exists.

Other Factors

A few states, notably North Carolina, appear to have made progress in solving quantity issues in many aspects of special education service delivery. Here, under-supplies of new graduates reflect efforts to continue expansion and diversification of special education services to meet the needs of children. States with large stretches of remote territory, on the other hand, experience attrition rates that match or surpass the rate at which new trainees graduate, and, thus, expansion cannot be pursued nor operation maintained without recruitment elsewhere, and without many other efforts to place personnel where they are needed.

Finally, where preservice enrollment is declining while handicapped pupil enrollment is stable or increasing, this disparity also contributes to the imbalance between the jurisdiction's supply of new graduates and its demand for personnel.

Pupil Enrollment and Preservice Enrollment

Comparisons of preservice trainee enrollments and pupil enrollments in the public schools yield further information concerning manpower supply and demand. Table 2 displays these comparisons for the 54 jurisdictions that are part of this survey.

If these enrollment figures were the *only* data pertinent to the supply of and demand for personnel, then such predictions as the following might be made. (Since 4 jurisdictions could not estimate the status of preservice enrollment, the number of jurisdictions considered below is 50.)

1. *No changes* in the current status of the supply of and demand for new personnel might be foreseen IF: N = 17
   - Preservice enrollment is steady and pupil enrollment is steady (N = 6)
   - Preservice enrollment is down and pupil enrollment is down (assuming that they are declining proportionately) (N = 10)
   - Preservice enrollment is up and pupil enrollment is up (assuming that they are increasing proportionately) (N = 1)
2. *More abundant pools* of new personnel might be foreseen IF: N = 5
   - Preservice enrollment is steady and pupil enrollment is down (N = 5)
   - Preservice enrollment is up and pupil enrollment is steady (N = 0)
   - Preservice enrollment is up and pupil enrollment is down (N = 0)
3. *Shortages* of new personnel might be foreseen IF: N = 28
   - Preservice enrollment is down and pupil enrollment is steady (N = 5)
   - Preservice enrollment is down and pupil enrollment is up (N = 14)
   - Preservice enrollment is steady and pupil enrollment is up (N = 9)

The foregoing predictions are not altogether reasonable because too many other variables impinge on supply and demand issues, e.g., attrition among employed personnel, different career choices by new graduates, current shortages or surpluses that already exist, and other factors. The strongest case can, however, be made for the third prediction, which involves possible future shortages of new personnel. If many of the extraneous variables (attrition, different career choices) influence the supply of personnel in a negative way, and if more shortages than surpluses of qualified personnel currently exist, then it would be possible to give some weight to the assumption that Table 2 suggests an impending shortage of new personnel for education of the handicapped in 28 jurisdictions.

Pupil Enrollment

The overall school-aged population of the United States has declined in recent years but is expected to increase in the middle to late 1980's as a result of increases in the birth rate. This means

Table 2. Status of Preservice Enrollment and Pupil Enrollment

	Preservice Enrollment				Pupil Enrollment			
	Not Known	Up	Steady	Down	Up	Steady	Down	Shortage Predicted
Alabama				Down		X		Shortage
Alaska			X			X		
Arizona				Down			X	
Arkansas				Down	Up			Shortage
California			X		Up			Shortage
Colorado				Down			X	
Connecticut	X					X		
Delaware			X			X		
Florida				Down	Up			Shortage
Georgia				Down			X	
Hawaii			X		Up			Shortage
Idaho				Down		X		Shortage
Illinois				Down			X	
Indiana			X				X	
Iowa				Down		X		Shortage
Kansas	X					X		
Kentucky			X				X	
Louisiana				Down			X	
Maine			X		Up			Shortage
Maryland				Down			X	
Massachusetts				Down			X	
Michigan				Down			X	
Minnesota				Down			X	
Mississippi			X		Up			Shortage
Missouri				Down		X		Shortage
Montana			X			X		
Nebraska			X			X		
Nevada				Down			X	
New Hampshire	X				Up			
New Jersey				Down	Up			Shortage
New Mexico				Down	Up			Shortage
New York			X		Up			Shortage
North Carolina			X				X	
North Dakota			X		Up			Shortage
Ohio				Down	Up			Shortage
Oklahoma				Down	Up			Shortage
Oregon				Down		X		Shortage
Pennsylvania				Down	Up			Shortage
Rhode Island	X					X		
South Carolina			X				X	
South Dakota			X		Up			Shortage
Tennessee			X		Up			Shortage
Texas				Down	Up			Shortage
Utah				Down	Up			Shortage
Vermont				Down	Up			Shortage
Virginia				Down	Up			Shortage
Washington			X		Up			Shortage
West Virginia				Down	Up			Shortage
Wisconsin				Down	Up			Shortage
Wyoming			X			X		
Guam			X				X	
Puerto Rico		X			Up			
BIA				Down	Up			Shortage
Dist. of Columbia			X			X		
N =	4	1	20	29	25	14	15	28

that manpower shortages that are chronic now are likely to become acute then, unless they are solved in the meantime. Given declining enrollments and diminishing resources in higher education, the supply of new graduates may reach a new low around the same time that the supply of pupils begins to swell.

Population shifts are also occurring in response to economic conditions, chiefly patterns of employment and unemployment. States like Ohio and Michigan are losing people, and Sun Belt states like Texas are getting them. High technology belts in New Hampshire and Massachusetts are growing, while many rural areas of the same states change not at all or are declining in census counts.

Participants in this survey described the handicapped pupil counts in their jurisdictions. Where the pupil enrollment is up, there is generally some degree of continuing growth in special education; otherwise the growth of the 1970's has not continued at the same pace in the 1980's. As Table 2 shows, handicapped pupil enrollment is increasing in 25 jurisdictions, is declining in 15, and is holding steady in 14. The table also reveals that migration from economically depressed states to the Sun Belt does not account very well for the variation.

Where enrollment is up, identification of children continues to be a priority and services are expanding in such areas as preschool and secondary education, and/or new groups of children are being deinstitutionalized. Where enrollment is down, there are numerous occasions of teacher layoffs, leveling off of services, more stringent definitions designed to limit numbers of eligible children, and other measures that are necessary to meet budgetary contingencies but prohibitive to program growth and, therefore, to including more children in the provision of services.

Preservice Enrollment

Table 2 shows that 29 of the 54 jurisdictions described preservice enrollment in special education as declining; only Puerto Rico's enrollment of trainees is on the upswing. Enrollment in 20 jurisdictions has shown no appreciable change, and, in four cases, the status of preservice enrollment was not known by respondents. But there is more to the anticipated supply of new graduates than these figures would imply.

Retooling. Estimates of rising, falling, or stable preservice enrollments may generally be puffed up by increasing numbers of regular educators re-entering higher education programs to become certified in special education as a hedge against reductions in force. Preservice enrollments may also be expanded by

large numbers of provisionally certified special education personnel who must demonstrate their eligibility for full certification at some future time. Neither group should be regarded as new manpower in the pipeline because they are, of course, already working and their completion of training will not relieve problems of quantity, though it may relieve problems of quality where provisional certification is concerned. This is precisely the situation in Puerto Rico, for example, and it is a desirable situation, but it may obscure accurate projections of developing new manpower. Puerto Rico, of course, is the only jurisdiction where preservice enrollment is reported to be increasing.

Teacher Tests. Several states have recently instituted, or have firm plans to institute, more stringent standards for admission into higher education; or teacher tests for certification; or procedures for supervising and evaluating new teachers during the first year of service on probationary certification; or all of these.

The teacher tests are reported to be having some negative effect both on entry into training and entry into the profession. In at least one state, those who fail the test (or the fair number who refuse to take it) comprise some of that state's graduates who leave to work in surrounding states where no test is required.

Some further examination of the teacher tests is occurring as they begin to take effect. It is reportedly possible, when occasioned by severe shortages of certain personnel, for officials to maneuver the competency criteria of a teacher test in the effort to ensure that some reasonable number of new teachers will pass it in a given year. In other words, competency expectations can be moved up and down to reflect supply and demand (and teachers, like wine, will perhaps be said to have been produced in vintage years or bad years).

Many valid questions have been raised about teacher tests. One of these questions concerns their potential bias against members of minority groups—whose enrollment in professional preparation programs has been singled out as on the decline by several participants in this survey. In this educational arena, as in others, issues of quantity, quality, and equity are intertwined.

Shortages of Personnel

The consistent personnel shortages reported by jurisdictions in this survey are shown on Table 3. No numbers of needed personnel within categories are shown here or elsewhere in this

Table 3. Consistent Shortages: Instructional and Service Categories

	ALL CATEG	PT	OT	SPEECH	ED-DIS	SPH	SEC	SED	MULT	VH	LD	HH	PSY-DIAG	COUN	SWL	EC	VOC	MOB	ERH TMH	RES ROOM	AUD	ADM	PARA	NONE
Alabama		X	X		X		X	X	X	X	X													
Alaska				X	X	■			X		■		X											
Arizona		X	X			X		X							X									
Arkansas		X	X			R		X		R		R		R										
California	ALL-R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
Colorado		R	R		X	X			R									X						
Connecticut		X	X	X		X									X		X				X			
Delaware		X	X				X																	
Florida		X	X	■	■					■	■													
Georgia	ALL-R	R	■	R	■	■	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
Hawaii			X	X			X			X		X												
Idaho	ALL	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Illinois	ALL	X	X	X	■	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Indiana	ALL-R	R	R	R	■	R	R	■	R	R	■	R	R	R	R	R	R	R	R	R	R	R		
Iowa		X	X				X				X									R				
Kansas		X		X	■		X				■	X							X					
Kentucky							X	X				X	X			X						X		
Louisiana	ALL	■	■	■	■	■	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Maine		R	R	X	X		X	X	X	X										X				
Maryland		R	R																					
Massachusetts		X	X	X								X	X											
Michigan																								None
Minnesota				R	■					X		X		X										
Mississippi				X	X					X		X		X										
Missouri	ALL-R	R	R	R	■	R	R	R	R	■	R	■	R	R	R	R	R	R	R	R	R	R		
Montana		R	R	R	X		X	X								X				X				
Nebraska		X		R	■	X	X	■	X	X		X								R				
Nevada							X																	
New Hampshire		X	■	■	■	X	X	■	R				X				X							
New Jersey									X			X				X	X			X		X		
New Mexico	ALL-R	R	R	R	R	R	R	R	R	R	R	R	R	R	■	R	R	R	R	R	R	R		
New York		R	R			X		X			X				X									
North Carolina					X																			
North Dakota		X	X	R	X	X	X		X							X								
Ohio		X	X					X																
Oklahoma				X						X	X								X					
Oregon	ALL-R	R	R	R	R	R	R	■	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
Pennsylvania		X	X			X		X	X	X								X						
Rhode Island		X	X												X									
South Carolina		X	X		X	X		X	■	X	X	X		X				■			X			
South Dakota		X	X	X	X	X		X	X															
Tennessee		X	X	R			X			R		R						X			X			
Texas					■	■		■		X														
Utah	ALL-R	R	R	R	R	R	R	■	R	R	R	■	R	R	R	R	R	R	R	R	R	R		
Vermont																X								
Virginia				X	X	X					X					X	X							
Washington					X		X				X													
West Virginia				X	X						X		X	X					X					
Wisconsin		R	R	R	X	X	X	R			R													
Wyoming		X	■			X		X	X				X											
Guam				X	■	X	X		X								X							
Puerto Rico		X			X	X	X	X	X															
BIA	ALL	■	■	X	X	X	X	X	■	■	■	X	X	X	X	X	X	X	X	X	X	X	■	
Distr. of Columbia						X		X	X															
N =	11	37	36	32	33	29	29	28	25	25	23	23	17	16	15	17	16	15	14	16	14	13	1	

■ = Severe shortage X = Overall shortage R = Rural shortage only

report; it was not our purpose to establish a new national body count but, rather, to determine the kinds of personnel in shortest supply and the kinds of services most affected by manpower shortages.

Responses are noted with an X (overall consistent shortage), an R (consistent shortage in rural but not in urban areas), or a darkened square (severe needs across a jurisdiction). Among the 11 jurisdictions reporting shortages in all areas, the term ALL-R indicates that their shortages pertain primarily to rural locations and not necessarily to urban centers.

The identification of shortages of personnel at the secondary (SEC) level pertains exclusively in this report to personnel to serve mildly to moderately handicapped secondary students. Every response in the COHI category (crippled and other health impaired) is actually the expression of need for people to teach the physically handicapped (other health impairment was not mentioned). In the learning disabilities category (LD), Florida specified severe learning disabilities, while West Virginia's response was specific learning disabilities. Both North Carolina and Alabama identified gifted and talented instructional personnel as in short supply, but these responses are not displayed because information on gifted and talented was not sought nor uniformly obtained in the survey. The Bureau of Indian Affairs was the only jurisdiction to emphasize significant shortages of paraprofessionals, and New Jersey was the sole respondent to report some shortages of personnel in adapted physical education (which is not shown on Table 3, as it is not thought to represent a serious nor consistent shortage in that state). These last two responses should not be interpreted to mean that no other shortages of paraprofessionals or adapted physical education personnel exist but, rather, that they were not reported as consistent and serious needs here.

Among the 54 jurisdictions reporting, 22 experience personnel shortages well into the school year (i.e., several months after school opens). These shortages can involve as many as a hundred open positions long after pupils have been enrolled and, in some cases, it is not possible to fill these openings with fully qualified personnel any any time during the school year.

The sole state to report no category of shortage is Michigan, possibly the state also most afflicted by economic downturns. Reductions in education budgets, relaxed restraints on caseload and age-span requirements, reductions in force, and related regressive events related to the fiscal situation have led to fewer personnel needs, rather than more. That is why Michigan reports

no outstanding shortages. Among some of the states that report relatively few shortage areas, generic certification may cluster most personnel needs under one heading (see the certification summary in Chapter 1), and this may make sizable shortages appear slight as they are displayed on Table 3. In other cases, the demand for personnel may be somewhat muted by the fact that many school districts are far from full services for students with certain handicaps or at particular age levels (as is discussed more fully in Chapter 4).

A better understanding of the actual meaning of Table 1 (which shows which personnel preparation programs are missing in the jurisdictions surveyed) may be obtained by comparing these data with Table 3, which shows consistent and serious areas of personnel shortage. A case for comparison is, for example, Louisiana, which reports that a preservice program of every type is operating within its boundaries (Table 1), but also reports shortages of personnel in every category (Table 3). Clearly, the availability of one or more preservice programs in a given specialty does not always guarantee a sufficient supply of new graduates in that specialty.

The most universal shortages of personnel appear in related services as composed of occupational therapists (with shortages in 37 jurisdictions) and physical therapists (with shortages in 36 jurisdictions). While unavailability of training programs for occupational therapists in ten jurisdictions and for physical therapists in four jurisdictions (Table 1) may contribute to these shortages, other factors suggested by respondents may have more influence. Occupational and physical therapists are trained apart from educational personnel, and they are certified and primarily employed by health and human service agencies and particularly hospitals. These therapists are eligible for pay scales higher than education's, and there is some indication that training programs may maintain somewhat curtailed enrollments, thereby limiting the supply of therapists and keeping salaries high. Therapists are also reported to be unprepared for the itinerant mode of service delivery which is sometimes necessitated in both urban and rural educational settings. Moreover, they have strong professional affiliations with the medical profession, and many reportedly desire to live and work near universities and medical centers. These factors create for education what may appear to be a manpower shortage; indeed, in Puerto Rico, for example, there are very few therapists available anywhere, in any agency. In general, however, the problems of recruiting occupational and physical therapists may have more

to do with their inclinations and options for work in other settings than with their actual supply in the employment market.

Under-supplies of personnel in speech/language/communication and personnel in emotional disturbance/behavior disorders also present themselves as serious national needs. Among the 54 jurisdictions in this survey, 33 reported consistent shortages of personnel to educate emotionally disturbed/behaviorally disordered students, and, in 12 of these jurisdictions, shortages are termed extremely serious. When coupled with shortages in severe emotional disturbance (including autism) reported by 28 jurisdictions (with extremely serious needs reported by 5), the findings suggest that mild to severe emotional disturbance is the single most vulnerable program area in special education where manpower is concerned. Since only two jurisdictions reported the absence of preparation programs in emotional disturbance/behavior disorders and nine reported no preparation in severe emotional disturbance, the extreme shortages of personnel suggest a problem of low production by existing preservice programs, as well as the distinct possibility that not enough preservice programs are operating in this disability area. (Table 1 shows only where a given preparation program is absent; it does not describe the sufficiency of numbers of programs that currently exist.) A companion problem may be the delay in developing or expanding programs for emotionally disturbed students in many school districts. Several respondents stated that, because there were few public school services for emotionally disturbed/behaviorally disordered pupils, few jobs may be in prospect for potential trainees and few practicum sites may be available for student teaching. (Other shortages in certain jurisdictions have this circular aspect: the establishment and growth of programs influences the demand for personnel, while the supply of personnel influences the establishment and growth of programs.) In the matter of severe emotional disturbance, where the foregoing factors are also important, an additional problem arises in the lack of certification coverage in some jurisdictions. This leads to failure in credentialing and endorsing personnel to serve children who are, nonetheless, present in the school population and should be eligible for needs-based service. Finally, the overall demand for personnel in mild to severe emotional disturbance and in behavior disorders also suggests that states and territories are attempting to organize more programs and serve more pupils with these handicaps than has been true in the past, an assumption borne out by many respondents in this survey.

Handicaps in speech/language/communication represent the second largest disability category (as reported from federal data in Chapter 1), and more than 1.1 million children and youth were receiving these services during the 1981-82 school year. At the same time, 33 of the 54 jurisdictions surveyed reported consistent shortages of speech/language clinicians or therapists, and five jurisdictions regard these shortages as severe. On the other hand, only three jurisdictions report no preservice programs for speech/language personnel. Shortages may be partially explained by insufficient numbers of new graduates, but other variables would appear to intervene, as well. Because many states use the standards of the American Speech, Language, and Hearing Association for credentialing and certification, and because these standards are stringent and require a high level of training, the manpower needs reported may, in part, indicate that the Association's quest for quality may limit the number of personnel from which to choose (but may also increase the likelihood that most, if not all, of those to be selected are competent). Yet another possibility also deserves to be considered, and that is the layoffs of speech/language personnel that have occurred in a few jurisdictions. Table 5 shows surpluses of special education personnel where they exist, and includes notations that some surpluses of speech/language personnel exist in a few locations as a result of reductions in force and other reorganizations brought about by fiscal cutbacks. Among the most widespread shortages reported in this study, speech/language personnel represented one of two shortages that is also a surplus (Table 3, Table 5). The question emerges as to the effect of layoffs in a few locations (and the fear of layoffs in other locations) on preservice enrollment decisions and ultimate career choices among potential speech/language therapists and clinicians for education.

Aside from severe emotional disturbance (including autism), the most severe handicaps subsumed in this study are severe retardation and related handicaps (SPH) and multiple handicaps (including deaf-blind children and youth). If one combines the number of jurisdictions reporting shortages in severe retardation and related handicaps (N = 29) and multiple handicaps (N = 25), what emerges is potentially widespread under-service for these low-incidence groups, which were original targets of intense personnel preparation with the enactment of Public Law 94-142 in 1975. As of 1982, ten jurisdictions reported no preservice program nor training track pertaining to severe retardation and related handicaps, while nine reported none for multiple handicaps (Table 1). Considering that these categories encompass a

relatively small proportion of the handicapped population, numbers of personnel being graduated may represent a problem. Here also, as in the case of emotional disturbance, the supply of new personnel may be influenced by less than full programming at the district level and by a subsequent lack of practicum sites in the present and uncertainty as to the employment future in this specialty.

Personnel for educating handicapped students in junior high schools, middle schools, and senior high schools also emerges as a major need, as reported by 29 jurisdictions. Part of this shortage stems from the fact that special education has traditionally focused on younger children, and the emphasis on secondary programming is relatively new, having received stimulation from the passage of Public Law 94-142. This factor influences manpower supply and demand in two ways: it reflects a new emphasis on secondary instruction, which creates a greater demand for personnel, and it reflects higher education's continuing lack of emphasis on specific preparation for secondary education of the handicapped, which perpetuates the undersupply of qualified personnel. When coupled with shortages of vocational special education personnel reported by 16 jurisdictions, the entire secondary arena becomes one of great concern in terms of manpower supply and demand.

Under-supplies of personnel in vision (N = 25 jurisdictions) and hearing (N = 23 jurisdictions) underscore the data in Table 1: preservice training in vision is lacking in 23 jurisdictions and preservice training in hearing is absent in 12 jurisdictions. Manpower data also suggest that more visually handicapped and hearing handicapped students are being enrolled in public schools, rather than in schools for the blind and schools for the deaf.

Among the remaining areas of shortage reported, personnel for learning disabilities represents the greater demand. Although no absence of preservice training programs is reported here, learning disabled students represent the largest handicapped group and its numbers may still be growing—a phenomenon of no little concern to the federal government and to some state governments. As redefinitions and redistribution of services occur (as is explained more fully in Chapter 4), a different supply and demand picture may emerge. Moreover, as Table 5 shows, Arizona is now reporting some small surpluses of learning disabilities personnel, brought about by recent measures to increase the case loads of these teachers.

The supply of personnel for bilingual special education is a serious problem in 16 of the 54 jurisdictions and is particularly

acute in New Mexico and Texas. In the case of Texas, Table 1 shows the absence of personnel preparation in this area, but several federally funded bilingual education projects (as opposed for formal higher education programs) are operating in the state; and the Texas spokesperson states that these projects alone cannot begin to meet the need. In the case of New Mexico, the only state in which a non-Anglo culture (the Mexican-American population) dominates, there is, quite surprisingly, no preparation program in bilingual special education, and this omission is reported to bring about very serious instructional problems in this aspect of education.

Reductions in Force

Since 1981, reductions in force have affected special education personnel in 24 jurisdictions (Table 4). The collective reduction in special education has been small, compared with regular education layoffs, and some reductions have been achieved by non-renewal of contracts. All reported RIF's have occurred in urban centers, and any surpluses left behind have been composed of teachers whose qualifications are for instruction of mildly to moderately handicapped pupils, as well as a very few clinicians.

As Table 4 shows, the outcome of some reductions in force has been the "bumping" of recently trained special educators by regular educators who have seniority (N = 12 jurisdictions). This is more easily accomplished in some places than in others. Certification practices in some states permit regular educators to teach handicapped children with minimal credits in special education, and, in some instances, no practical experience is required in training if one has already done regular classroom teaching.

Certified special education teachers are working as paraprofessionals in some urban districts (N = 12 jurisdictions) because they have been laid off or, more likely, because there are no openings in their specialty areas in the city but they are reluctant to work elsewhere. (Indeed, a Texas respondent described teachers "who are cashiering in Safeway, rather than leave Austin.") When open positions are scarce, as they are in times of fiscal austerity, new graduates also see paraprofessional work as a way to get into the system and get in line for teaching jobs when they do open up.

On the supply side, reductions in force in Massachusetts have fed special education teachers to many states in the Northeast, as well as to states west of the Mississippi River; Michigan's

Table 4. Reductions in Force Affecting Special Education

	NONE	RIF's	REG ED BUMPS OF SP ED	TCHRS WORKING AS PARAS
Alabama		YES		YES
Alaska	NONE			
Arizona		YES		
Arkansas	NONE			
California		YES	YES	YES
Colorado		YES	YES	
Connecticut		YES		
Delaware	NONE			YES
Florida	NONE			
Georgia	NONE			
Hawaii	NONE			
Idaho		YES		
Illinois		YES	YES	
Indiana		YES		
Iowa		YES		
Kansas		YES		
Kentucky	NONE			
Louisiana	NONE			
Maine	NONE			
Maryland		YES	YES	YES
Massachusetts		YES	YES	YES
Michigan		YES	YES	
Minnesota		YES	YES	
Mississippi	NONE			
Missouri	NONE			
Montana		YES		
Nebraska		YES	YES	YES
Nevada	NONE			
New Hampshire	NONE			
New Jersey	NONE			
New Mexico	NONE			
New York		YES	NYC ONLY	
North Carolina	NONE			YES
North Dakota		YES		YES
Ohio		YES	YES	YES
Oklahoma	NONE			
Oregon		YES		
Pennsylvania		YES	YES	YES
Rhode Island		YES	YES	YES
South Carolina	NONE			
South Dakota	NONE			
Tennessee	NONE			
Texas	NONE			
Utah	NONE			
Vermont	NONE			YES
Virginia		YES		
Washington		YES		
West Virginia	NONE			
Wisconsin	NONE			
Wyoming	NONE			
Guam	NONE			
Puerto Rico	NONE			
BIA	NONE			
Distr. of Columbia	NONE			
N =	30	24	12	12

laid-off teachers are also broadly dispersed. A few jurisdictions reported that these surpluses due to reductions in force are creating a "buyer's market" for the first time in certain rural school districts, but there do not appear to be any overall alleviations of rural recruitment problems in states where over-supplies of personnel newly exist.

Surpluses

The 30 jurisdictions reporting surpluses of special education personnel are shown on Table 5. All of these surpluses are described as small, and all are concentrated in urban areas, often in states where some vacant positions in rural schools could be filled by the surplus personnel if they chose to work in rural areas. For example, in New Mexico, the reported surplus concerns not people languishing without work in Santa Fe or Albuquerque, but refers instead to the many paper applications received from all over the country for teaching positions in one or two choice sites; meanwhile, severe shortages continue in other districts.

Many of the surpluses shown on Table 5 are due to reductions in force. In several of the jurisdictions, a surplus had appeared for the first time in 1982. In this sense, surpluses would appear to be signs of economic strains and subsequent reorganization of programs and staffing patterns. Notations on Table 5 make causes of surplus more clear.

Attrition

All but four jurisdictions expressed concerns related to attrition of personnel, which is most problematic in rural districts where turnover is very high. There are reports of situations in which the staff of entire rural districts leave after one school year (i.e., occasions of 100-percent attrition), or in less than one school year. Otherwise, rural attrition rates as high as 50 percent are not uncommon.

Apart from the rural situation, general attrition rates as high as 20 percent among special education personnel are reported, and even a site as attractive as Hawaii reports difficulties, inasmuch as its out-of-state teachers tend to remain there no more than three years. Thus, although applicants may be plentiful in some locations, rapid rates of turnover affect the balance between supply and demand.

Table 5. Surpluses of Special Education Personnel

	NONE	SURPLUSES IN URBAN CENTERS
Alabama		MR urban surplus; rural shortage
Alaska	NONE	
Arizona		LD surplus as LD caseloads increase; decl enrollment in unemployed towns
Arkansas	NONE	
California		Tchrs of mild/moderate; due to RIF's and bumping
Colorado		Tchrs of mild/moderate; desirable areas only; due to RIF's, bumping
Connecticut		EMR surplus urban; due to elementary RIF's
Delaware		Tchrs of mildly handic, small urban surplus
Florida	NONE	
Georgia		MR surplus urban; rural shortage
Hawaii	NONE	
Idaho	NONE	
Illinois	NONE	
Indiana	NONE	
Iowa		Teachers with only undergraduate specialization in special education
Kansas	RARE	
Kentucky	NONE	
Louisiana	NONE	
Maine	NONE	
Maryland		Small surplus; due to RIF's
Massachusetts		Tchrs of mild/mod; eastern surplus, rural shortage; due to RIF's
Michigan		MR surplus urban; due to RIF's and other cutbacks
Minnesota		LD & Speech, change in LD ratios; cutbacks; urban surplus, rural shortage
Mississippi	NONE	
Missouri	NONE	
Montana		Tchrs of mildly handic; urban surplus, rural shortage
Nebraska		Tchrs of mildly handic; urban surplus new in 1982; rural shortage
Nevada	NONE	
New Hampshire		General special educators; small surplus primarily in southern section
New Jersey	NONE	
New Mexico		Tchrs of mildly handic in few choice areas; rural shortage
New York		Tchrs of mildly handic in metropolitan centers
North Carolina		Tchrs of mildly handic in few choice areas
North Dakota		Urban surplus, rural shortage
Ohio		EMR, Speech, Psychologists in metropolitan centers; rural shortage
Oklahoma	NONE	
Oregon		Tchrs of mildly handic; western surplus, rural shortage
Pennsylvania		Tchrs of mild/moderate; due to RIF's and cutbacks
Rhode Island		Tchrs of mild/moderate; due to RIF's and bumping
South Carolina	NONE	
South Dakota	NONE	
Tennessee		Tchrs of mildly handic; small urban surplus, rural shortage
Texas		Tchrs of mild/moderate; urban surplus, rural shortage
Utah	NONE	
Vermont		MR & Resource Room Tchrs; small urban surplus
Virginia	NONE	
Washington		Tchrs of mildly handic; urban surplus, rural shortage
West Virginia	NONE	
Wisconsin		MR surplus in metropolitan centers
Wyoming		Tchrs of mildly handic, urban; rural shortage
Guam	NONE	
Puerto Rico	NONE	
BIA	NONE	
Dist. of Columbia		Surplus applicants from military, civil service population
N =	24	30

Some respondents pointed out that trained teachers, over the course of their careers, tend to work with students who are less and less severely handicapped, inasmuch as they can receive the same salary for easier, more immediately gratifying work. Further, when teachers are dual-certified in both regular education and special education, they may eventually switch to regular education. When fiscal constraints limit regular education positions, some people will put in time in special education simply to get in line for the jobs they really wanted in the first place. All of these factors account for some attrition, even though personnel may not leave the profession. Other attrition stems from the fact that so many more lucrative jobs are opening to people with backgrounds in education.

Burnout is also a factor; among teachers of emotionally disturbed pupils, burnout accounts for attrition rates as high as 30 percent every three to four years, and is also common among personnel who serve severely handicapped populations. For example, North Carolina's focus of concern is attrition due to burnout, particularly among teachers of emotionally disturbed students; officials believe that this kind of attrition creates problems in personnel supply; otherwise, the state's overall attrition in education is 7 percent and, in special education, it is 6 percent. North Carolina also represents concerns of other jurisdictions in the expectation of a major increase in the number of teachers who leave the profession when the employment picture brightens and the job market again expands: "We have retained teachers during the last few years whom we would have normally lost or who would not have been teaching in the first place if they felt that they had other options."

The four states that report marked improvements in attrition rates in the past few years are Idaho, Iowa, Ohio, and Pennsylvania. In each case, the major factor appears to be that few alternative jobs are available, the job market is uncertain, and the troubled economy has generally limited options that had heretofore been exercised more freely. All of this suggests that, if many personnel shortages prevail now, demand will further outstrip supply when and if the nation's economy and productivity improve.

Individual Profiles of Jurisdictions

Problems and issues related to the quantity of personnel for special education have been generalized to form a national picture in earlier sections of this chapter. In the remainder of Chapter 3, individual profiles of jurisdictions included in the survey show the situation of each in relation to the demand for and supply of educational personnel.

Alabama

Alabama reports that the supply of new graduates is uneven and largely inadequate; teachers of the mentally retarded predominate, though there continue to be rural shortages of these personnel. Tennessee and Florida are the major targets of out-of-state recruitment. Alabama has no preparation program in visual handicaps. The University of Alabama-Birmingham has plans to establish such a program, but training in the sensory handicaps is costly and attracts relatively few trainees, a matter of concern in states like Alabama where funds have diminished and preservice enrollment is down.

The enrollment of handicapped pupils in Alabama's schools is not decreasing. The state goes well into the school year with open positions in special education. Major areas of shortages are for personnel in: emotional disturbance/behavior disorders, severe disturbance/autism, visual impairment, learning disabilities, multiple handicaps, and all handicaps at the secondary level. Shortages of occupational and physical therapists are acute only in rural areas, but urban centers, on the other hand, are running out of money to keep these therapists on the payroll, and contracts for their service are now superseding their continuous employment in the schools.

Small reductions in force have occurred in some of Alabama's urban centers but not to the extent that a manpower surplus has been created. Personnel attrition continues to be a problem, especially in rural districts.

Alaska

Alaska's greatest need is to expand and develop preservice training at its own universities. The University of Alaska in Juneau prepares resource teachers and generalists, and the University of Alaska in Anchorage has programs in learning disabilities and mental retardation. Otherwise, no in-state teacher education is available, except for preparation of occupational and physical therapists outside the colleges of education. This omits training in vision, hearing impairments, emotional disturbance/behavior disorders, severe emotional disturbance, severe retardation, speech/language, physical handicaps, and school psychology. Overall preservice enrollment in special education is small but stable, and the pupil enrollment is steady.

Between 97 and 99 percent of Alaska's teachers come from out of state, particularly from colleges and universities in the Northwest. Salaries are high enough to attract numbers of applications, but a major difficulty is in finding suitable housing in

remote areas. Both the state education agency and local school districts have to be concerned with finding personnel housing. Attrition also presents a severe problem, as many people cannot endure the rugged climate and isolation of the bush villages, where turnover is excessive. Alaska's greatest personnel shortage is in personnel to serve severely retarded and otherwise severely handicapped pupils. The other most significant need is for teachers of the emotionally disturbed. Also in short supply are speech therapists, school psychologists, and specialists in deaf education.

Arizona

Arizona's supply of new graduates is reduced by the number of out-of-state trainees who return to their home states for employment. The state lacks a preparation program for occupational therapists and has no formal program to prepare people in vocational special education, although some interdisciplinary activity is occurring between vocational and special education on campuses. Arizona requires a teacher test for certification.

Overall preservice enrollment is down. Universities have experienced staff reductions and cutbacks in summer programs, and higher education is considering a move toward more generic preparation of personnel in special education. Pupil enrollment has diminished somewhat but is expected to climb again in the mid-1980's.

Major personnel shortages are in severe emotional disturbance and severe multiple handicaps. There is a shortage of personnel who are certified in more than one category of special education. All of these shortages are acute in rural areas because of the high rate of personnel turnover.

Reductions in force have as yet had little effect on special education personnel, but a number of school psychologists and psychometricians have been laid off in the past year. Moreover, a recent measure to increase case loads in learning disabilities has resulted in a reduction in learning disabilities positions and an accompanying new surplus of these personnel.

Arkansas

Higher education is relatively inexpensive in Arkansas, thus attracting a certain number of trainees who remain only long enough to complete training. The greater problem is that Arkansans tend to leave, too, once their training is completed. Half of the 1981 special education master's graduates at Arkansas State University went elsewhere to work. Salaries are as low as $10,000

for bachelor's degree graduates, and $11,000 to $12,000 for master's graduates, and pay is not increasing. New recruitment and attrition also present severe difficulties in the many rural districts.

While the state reports a preparation program for every type of needed personnel except bilingual special education, trainees are reluctant to enter certain programs (notably emotional disturbance/behavior disorders) because the sparsity of public school programs for children with these handicaps reduces the prospect of getting a job. Overall, Arkansas preservice enrollment in special education is declining. Pupil enrollment, on the other hand, is increasing, partly because of recent attention to deinstitutionalization of handicapped children and the movement of children from the School for the Deaf in Little Rock to public school placement in the wake of the Springdale case.

The main shortages reported by Arkansas are in personnel to serve the visually handicapped and hearing impaired. However, programs in other areas cannot be staffed properly in rural areas, and the state goes well into the school year with position vacancies.

Bureau of Indian Affairs

The BIA reports serious shortages of preservice preparation programs to train people to serve handicapped Indian children, and a corresponding decline in numbers of appropriately trained new graduates. The only surviving federally funded preservice project is a grant award to Pennsylvania State University to prepare personnel of Indian origin. Other institutions of higher education interested in Indian education are the University of Southern California which advertises for eligible applicants, the University of Arizona, and University of South Dakota in Vermillion, which has a very small program to prepare administrators, principals, and supervisors for Indian special education. Several other colleges and universities are involved in inservice education for Indian educators. In many cases, however, graduates of these programs do not necessarily come to work on the reservations.

Among BIA schools in 29 states, there are 4,900 to 5,000 handicapped children to be served, and 310 additional children with severe and multiple handicaps who are in public and private institutions. Economic problems in some states are prompting school districts to shift Indian pupils back to BIA schools, a factor that contributes to a slight growth in pupil enrollment. At the same time, the BIA schools cannot find enough professionals or paraprofessionals to provide needed special education services.

Shortages are critical in personnel for the visually handicapped, multiply handicapped, and learning disabled, as well as for occupational and physical therapists. Schools continue into the year with large numbers of open positions.

The rural nature of Indian education presents a recruitment and attrition problem. Some reservation schools may be 150 miles from a commercial grocery store, and other examples of rural isolation abound. Since personnel staffing BIA schools must comply with certification requirements of the states in which the schools are located, out-of-state applicants may be impeded by lack of reciprocity. On the other hand, BIA schools are experiencing a recent slight improvement in recruiting personnel because layoffs in certain states have made people more available.

California

California has higher education programs to prepare personnel in all of its service categories, and four of its universities offer extensive training programs in low-incidence handicaps. Of these, San Francisco State University supplies personnel for sensory impairments and severe handicaps to many other states as well. Nonetheless, California cannot meet all of its personnel needs from its own pool of graduates. Overall preservice enrollment in special education has not changed; whereas some programs have fewer students, other are full. There is a small decline in pupil enrollment, but the state's population is shifting and, while some district enrollments are decreasing, others are growing.

California reports severe shortages of all types of personnel at all levels in its rural districts, but surpluses of personnel qualified to serve the mildly handicapped exist in all urban areas, which are laying off 200 to 300 special education people per year. Where layoffs of general and special education personnel have occurred, regular educators are frequently taking the positions of (bumping) special educators. Bumping is facilitated by the fact that regular educators need only six units of special education credit to obtain a provisional certificate and have five years to complete full certification requirements. Thus, regular education personnel with seniority can bump special educators who are fully certified in some districts, depending on the unit contract. Bumping by regular educators primarily affects the resource specialist role and other positions involving mild learning handicaps, and has had no effect on personnel serving the severely handicapped.

Colorado

Colorado has no formalized preservice program to prepare personnel for education of the multiply handicapped or severely retarded. The University of Northern Colorado has been attempting to build such a program, but the effort is threatened by budget cuts and appears to be coming to a halt. Otherwise, Colorado's higher education programs came close to meeting the state's personnel needs in terms of numbers in the current context of release of school staff, budget cuts, and a general slowdown of expansion at the district level. There is an accompanying decline in preservice enrollment, and both state and federal budget rollbacks have led to layoffs of higher education personnel. Current circumstances also include a projected decline in pupil enrollment.

Colorado accepts a good number of out-of-state applications, and the manpower supply has also increased because of layoffs in urban centers. However, when reductions in force occur, those left in the district tend to be those with seniority, and these are not necessarily the best trained personnel. Moreover, regular educators can obtain rapid retraining and then bump newer and more comprehensively prepared special education personnel. Relief from practicum, which is also being put into effect, removes the need for certified regular educators to include a practicum in their special education endorsement training.

Rural and mountainous areas of Colorado, however, experience great difficulty in recruiting and keeping personnel. Priority needs in rural areas are for people to teach multiply handicapped and severely retarded populations, and for educational consultants to work with classroom teachers.

Connecticut

Higher education in Connecticut prepares personnel in the areas of severe retardation, speech impairment, audiology, vocational special education, bilingual special education, physical therapy, and occupational therapy. Not available are training programs in vision, hearing impairment, and physical handicaps. Information was not available on the status of preservice enrollment, but the pupil enrollment in special education is considered to be stable.

In Connecticut, demand exceeds supply of personnel to serve the severely handicapped and speech impaired, as well as of audiologists, vocational special education personnel, bilingual special education personnel, occupational therapists and physical therapists. Supply exceeds demand only for personnel in

instruction of the educable mentally retarded. Supply equals demand for personnel in: trainable mental retardation, emotional disturbance/behavior disorders, learning disabilities, physical handicaps, visual impairment, hearing impairment, adapted physical education, early childhood education, therapeutic recreation; there are also adequate supplies of school psychologists, paraprofessionals and special education administrators.

Reductions in force are starting to occur at the elementary level in Connecticut. Conversely, it remains difficult to fill secondary positions in special education.

Delaware

Delaware has two higher education programs that prepare personnel for special education. The University of Delaware, with a staff of five, offers preparation in mild to moderate handicaps, and Delaware State College, with one faculty member, provides some training through funds from the state's Comprehensive System of Personnel Development. As of 1983, Delaware State College also has an early childhood special education training project funded by the Division of Personnel Preparation, Special Education Programs, U.S. Department of Education. There are no training programs in vision or hearing impairment, nor in any moderate to severe handicap. In response to a new statewide directive for public school programming for autistic pupils, the University of Delaware is offering inservice graduate level training, and similar training will be provided in deaf-blind education, which is another emerging emphasis in Delaware. Under-supplies of personnel in secondary and vocational education for the handicapped are also being addressed through inservice training. Both preservice enrollment and pupil enrollment are level.

In 1981, 20 percent of the state's new teachers were from Delaware, and the remainder came largely from Pennsylvania and Maryland. Some reductions in force have occurred, and there is a small surplus of teachers of the mildly handicapped, some of whom are currently working as paraprofessionals. The major shortage area is in occupational and physical therapists for orthopedically handicapped students.

District of Columbia

Teachers come to the District of Columbia from all over the United States. Many new graduates are furnished by universities within the District and from universities in its greater metropolitan area, which includes portions of Virginia and Maryland. Approximately 50 percent enter from other states,

primarily because of the transient population of government and military spouses available. This strengthens the manpower supply, but also creates a high turnover rate and has recently led to some surpluses of teachers of the mildly handicapped.

Some shortages are reported in severe emotional disturbance, severe retardation, multiple handicaps and deaf-blind instructional services. The District usually has a few vacancies going into the school year, and its funding system permits it to open new programs in the middle of the year. The pupil enrollment has stabilized.

Florida

Florida's major gap in preservice programming is in speech correction; one of the oldest preparation programs in the state did not get a penny to continue training. Overall, higher education is not supplying more than 40 percent of the new personnel that the state needs, and preservice enrollment has dropped markedly in the past few years. Upgraded admissions standards have reduced the number of eligible entry-level trainees, and there has been a significant loss of female and minority trainees. The state's new procedures for upgrading teacher education and certification have also influenced preservice enrollment. All applicants for positions must pass a written exam concerning 23 generic competencies, and first-year teachers are supervised and evaluated by a peer teacher, principal, supervisor and support team.

Pupil enrollment in Florida, on the other hand, is increasing in the face of critical shortages of personnel to serve severely learning disabled, emotionally disturbed/behavior disordered, and speech impaired students, as well as low-incidence populations, including children with sensory impairments and severe retardation. The state is also short of occupational and physical therapists.

Georgia

Higher education in Georgia does not supply enough new graduates in any area except mental retardation, and even these are in short supply in rural areas. Although master's preparation in speech is available in the state, these programs are supplying no more than one-third of the needed speech personnel. Further, Georgia has no program to prepare personnel in visual impairment nor in education of the deaf-blind. There is a decline in preservice enrollment that stems, in part, from program reductions caused by budget losses and loss of money for student

support. Another factor is the new competency-based certification provision which requires a written test and an on-the-job assessment. The state has recently undertaken a review, revision, and update of the tests, which are now being offered in the areas of professional knowledge and mental retardation.

State pupil enrollment is declining somewhat but is increasing considerably in certain areas, including the metropolitan Atlanta area. Each school year begins with up to 600 vacancies in special education, which is the state's number-one area of shortage in all of education. The seriousness of the problem has prompted the Governor to order a study of attrition and other factors, including burnout and low salary levels among these personnel. No manpower problem is presented in occupational and physical therapy because there are many regional hospitals which provide these personnel on a contract basis.

Rural recruitment and attrition continue to be problems, and rural districts frequently offer better incentives than do urban schools. (One district made all facilities barrier-free in order to hire a speech therapist who was handicapped.)

Guam

The University of Guam offers a generic bachelor's degree with no specialty emphasis; the program is designed to prepare resource room teachers. Although Guam's highest incidence of handicap is speech/language impairment, no program to prepare personnel for speech correction was available until 1983; the University of Guam now offers bachelor's level training for speech/language clinicians. Guam has no programs nor training tracks to prepare personnel for severe retardation or multiple handicaps. The deaf-blind program, which functions as a school, was initiated several years ago when Guam identified approximately 100 rubella children. At that time, a special inservice training program was mounted for teachers and aides, who continue to serve these students. Since the need is met in this manner, the lack of preservice training in deaf-blind instruction is not a problem, but the need of an overall preservice program in multiple handicaps continues.

The University of Guam is a small university with about 2000 students which has experienced a tremendous decline in enrollment in its College of Education. The special education program has been holding steady, however, for the past few years. Guam's pupil enrollment is declining somewhat. New graduates are not sufficient to meet manpower needs, but Guam also has applications from dependents of servicemen stationed there.

Shortages continue in emotional disturbance/behavior disorders, severe retardation, multiple handicaps, speech impairment, vocational special education, and secondary special education. As the elementary programs approach maximum enrollment, it is at the secondary level that major shortages are identified. At both levels, Guam has open positions well into the school year.

Hawaii

The University of Hawaii and Brigham Young's local campus are the major suppliers of new personnel, but Hawaii also needs out-of-state applicants. There are no preparation programs in hearing impairment or visual impairment, and, in both cases, training should be initiated not only for Hawaii but also for the entire Pacific Basin. The Hawaii Department of Education has referral arrangements with San Francisco State University and Gallaudet College for recruiting new personnel in these areas.

Overall preservice enrollment in Hawaii's universities is steady, and the pupil enrollment on the islands is increasing. Besides the difficulty in recruiting personnel in vision and hearing impairment, Hawaii experiences shortages of vocational special education personnel and personnel for instruction of handicapped secondary students in general, as well as needs for occupational and physical therapists. Recruitment is made easier by the state's desirability to out-of-state applicants, but the other side of the coin is that most of these personnel remain for only about three years, thus creating a problem of high staff turnover.

Idaho

Most of Idaho's preservice programs focus on preparation of teachers and other personnel to serve the mildly and moderately handicapped. Idaho State University is working with staff of the Idaho State School for the Deaf and Blind to resurrect a dormant training program for teachers of the hearing impaired. Idaho State University also provides training for teachers of the emotionally disturbed and for speech pathologists and audiologists. The University of Idaho provides specialized training for work with severely retarded and multiply handicapped pupils and in adapted physical education and recreation. Idaho does not have a program to certify personnel in visual impairment. Preservice enrollment in special education has stabilized or declined slightly.

The number of out-of-state special education teachers in Idaho has increased over the years to equal about 50 percent of the teaching force. About half of these come from Utah, and the

remainder are recruited from Washington, Oregon, California, and Colorado.

Idaho's population of handicapped pupils is level, and the state is also seeing a stabilization of attrition due to the uncertainty of the job market and accompanying increased mobility of its personnel. Between 1977 and 1981, the attrition rate in special education dropped from 50 percent to 20 percent. Nonetheless, Idaho reports manpower shortages among all types and levels of special education personnel. At the secondary level, the need is for school programs, as well as for personnel.

Illinois

Higher education in Illinois has mounted preservice programs to match all special education position categories in the state, and the University of Illinois and Illinois State University provide graduates to many states in the specialties of severe retardation and sensory impairments, respectively. Numbers of in-state graduates are not, however, uniformly sufficient to meet manpower needs in Illinois districts. Typical problems with needs data are reported; the state has difficulty in demonstrating the very real needs for additional personnel on the basis of pure numerical data, because so many other factors influence the meaning of such data.

Preservice enrollment is declining in Illinois, which has also had an overall decline in enrollment of about 160,000 over the past ten years due to population shifts. This represents 21 percent of the former school-aged population. Among the state's 1,009 school districts, 47 percent have lost 10 to 25 percent of their enrollments during this period, while 25 percent have lost 30 percent of the school-aged population, and a few have lost up to 60 percent.

Nonetheless, rural and urban shortages are reported for every type and level of personnel; 1981-82 data show shortages in all specialty areas, with the greatest shortages in personnel for instruction of the physically handicapped, severely retarded, and emotionally disturbed/behaviorally disordered, and for speech/language personnel. Shortages also present problems in early childhood education, whose preparation is not a general emphasis in higher education in Illinois because the state's special education statute is permissive with regard to preschool services for handicapped children.

Attrition of special educators remains a problem, particularly in rural districts. For 1981-82, attrition among special education personnel (11.8 percent) was greater than attrition of elementary

(8.2 percent) or secondary (7.9 percent) personnel in regular education.

Both rural and urban areas have experienced some reductions in force due to declining enrollments, and some RIF's have included special educators. There have been occasions when regular educators who are laid off have bumped special educators who lacked seniority; in Illinois, it is possible for regular educators to assume special education positions in this manner with as few as four special education courses. The biggest change is that more and more districts are releasing psychologists from full-time employment, and then hiring them back on an hourly contractual basis without tenure or fringe benefits; this step is being taken as a monetary measure.

Indiana

Enrollment data from higher education indicate that sufficient numbers of new personnel should be available to meet Indiana's needs, but these data are flawed by the facts that: (a) large proportions of the higher education enrollment are comprised of practicing teachers in master's training to comply with the state's requirement that all teachers have graduate degrees within the next five years; and (b) enrollment figures do not reflect the intentions of the graduates to remain in or leave the state. Though preservice enrollment does not appear to be significantly decreasing, it is likely that it is overpopulated with already employed personnel, rather than new personnel. Training programs are available in the state for all areas of exceptionality, except visual impairment.

Although pupil enrollment has declined somewhat, all areas of special education are always on the Teacher Training and Licensing Commission emergency list. The largest areas of emergency shortage in 1981 were learning disabilities, emotional disturbance/behavior disorders, and severe emotional disturbance/autism. New needs have been created, particularly in learning disabilities, by shifts in groupings and case loads.

Layoffs in Indianapolis last year released approximately 500 people, including 80 to 85 special educators, and closed ten elementary schools and one high school. Some districts are also dropping administrative, central office, and supervisory personnel and combining programs in ways that may create joblessness among some personnel in special education. Meanwhile, recruitment and retention remain problemmatic in rural sections of the state.

Iowa

Iowa can use all of its own graduates as well as large numbers of out-of-state people. There are no in-state programs to supply certified people in vision or in hearing impairment, and the slender supply of trainees preparing for the secondary level is inhibiting program growth in local districts. Many teachers in Iowa have received training in Nebraska, South Dakota, and Missouri, and audiologists are recruited in 26 states. Preservice enrollment is down, and the pupil enrollment has shown some decline.

While Iowa's shortages affect all areas of special education, the most severe shortage is for personnel in multidisability resource rooms, a service delivery mode that is increasing, particularly in rural areas. The next greatest need is for learning disabilities personnel in rural districts.

Iowa has experienced some reduction of intermediate middle management personnel and direct service people; the total reduction in 1981-82 was approximately 5 percent. Though these reductions have not created any appreciable surplus, there has been some hiring of special educators as paraprofessionals in urban areas. The general rate of personnel attrition is declining slightly because so few jobs are available in education or other fields.

Kansas

Kansas lacks preservice training in visual impairments. The lack of a fully approved program in early childhood education for the handicapped stems from the fact that this level of education has not yet been mandated in the state. Kansas's several major universities are not producing sufficient certified people to meet state needs, and many higher education classes are filled with provisionally certified teachers working toward full certification. The overall status of new trainees enrolled in preservice training could not be estimated.

The greatest manpower needs are in the areas of learning disabilities and emotional disturbance/behavior disorders. Other shortages occur in trainable and educable mental retardation, hearing impairment, and speech impairment at the elementary and secondary levels. Physical therapists are also difficult to find. A few urban areas have reduced numbers of personnel, but surpluses are extremely rare except for occasional instances of certified people working as paraprofessionals in the oil-rich towns of western Kansas. Personnel shortages and turnover make rural services minimal—"you lose a teacher, and there goes the third grade." Because of confusion in 1981 as to the

Part B funding pattern for PL 94-142 monies, Topeka cut off all new teachers after a certain date but was later able to rehire some of them, but this situation cost them some vocational people that have been difficult to replace.

Kentucky

Kentucky's new graduates are not numerous enough to meet the demand for personnel in the state, particularly at the secondary level. In the absence of a full program to train personnel in severe emotional disturbance/autism, there are bits and pieces of training, and there is but one small preparation program in hearing impairment. There is no decline in preservice enrollment, which is complemented by trainees who are crossing over from regular education. There are also moves toward implementing a more selective university admissions policy and to introduce competency testing for teachers.

Kentucky's pupil population is declining somewhat but shortages of personnel continue to be serious in the areas of hearing impairment, secondary education for the handicapped, early childhood, severe behavior disorders/autism, and for directors and administrators of special education and diagnosticians. Layoffs have not affected special education personnel.

Louisiana

In Louisiana, the numbers of preservice trainees currently enrolled approximate the attrition rate in special education. The state has recently become self-sufficient in terms of having personnel preparation programs to match all personnel categories; the program in visual impairment was initiated a little more than a year ago, and the preparation program in hearing impairment is three years old. The state needs far more personnel than its higher education institutions are supplying, and recent evidence shows some reduction in the numbers enrolling in preservice training. Five years ago, the state superintendent ordered that all teacher education graduates pass the National Teachers' Examination in order to be certified, and there has since been some question as to the test's fairness to minority groups. A revalidation of the test is in progress and, meanwhile, graduates who do not pass the test, or who do not take the test, are passing into employment in other states. By the same token, Louisiana recruits from other states.

Private school enrollment is growing in the face of a decline in public school enrollment. In and of itself, this enrollment change

does not decrease overall needs for service in special education, because the public schools provide many services for handicapped students enrolled in parochial schools. Moreover, 291 families applied to educate their children at home when home study was approved by the Louisiana legislature in 1980; as of 1982, 71 had not renewed their applications.

Personnel shortages exist for all types and levels of special education personnel in both urban and rural areas. The most acute shortages are in severe mental retardation, emotional disturbance, speech therapy, occupational and physical therapy. (Louisiana has the highest incidence of speech-impaired pupils in the United States.) The teacher education shortage extends into regular education, as well; in 1981, over 600 persons who did not have education credentials at all received credentials because there were no certified people to take the jobs. As recently as March, 1983, the state superintendent convened a 44-member task force to study Louisiana's teacher shortage, which is especially serious in mathematics, science, and special education, which together are short over 800 teachers. One of the superintendent's recommendations is that trainees be given free tuition if they agree to serve Louisiana's schools for ten years.

Maine

Maine's supply of new graduates does not meet its needs, particularly at the secondary level. No training program is available in the state for personnel to serve hearing impaired or visually impaired pupils. Although the general preservice enrollment has declined, this is not the case in special education, which is considered a "land of opportunity."

Maine's biggest statewide educational recruitment problem for 1981-82 was in hiring special education personnel. Of 1,609 total teaching vacancies in 1981, 345 were in special education, for which the placement office received 68 applications. The next greatest demand was for personnel for grades K-3—but for these positions there were 106 applicants. The personnel problem exacerbates in rural areas. The greatest lack of new graduates is in speech and hearing. The training program at the University of Maine-Farmington has taken a dual approach that produces graduates with two certifications: regular teacher and specialist in a special education area. A number eligible for certification in speech thus become regular teachers, instead. Moreover, the master's programs at the University of Maine-Orono was badly damaged by the fluctuations in Part D personnel preparation grant funds, and one of the programs that suffered was speech

preparation. Even in December of 1982, the state had approximately 20 open positions in speech/hearing that could not be filled. Other shortages include: resource room personnel and personnel to serve the multihandicapped, visually impaired, emotionally disturbed/behavior disordered, severely emotionally disturbed/autistic, and handicapped students in the secondary schools. Recruitment of occupational and physical therapists is seen as a distribution problem, rather than a shortage problem.

Maine is not getting as many teachers as expected from the layoffs that occurred in Massachusetts, because these people are willing to go to the southern part of the state where the shortages are not as crucial, rather than to the northern rural areas. There are no surpluses of special education personnel even in urban areas, and the enrollment of handicapped pupils goes up by about 500 per year, even though the overall pupil population is exhibiting some decline.

Maryland

Maryland does have a full complement of training programs to match special education positions and needs, but its overall preservice enrollment in special education is down. However, the state anticipates no preservice quantity problems because there are not going to be many new special education positions anywhere in the state for the coming three years. The economy is not only holding back development, but has already caused significant reductions in force. According to a spokesperson, these budgetary measures have resulted in spreading personnel too thin and to underscoring a disparity between the educational needs of children and the number of personnel positions that can be funded. Montgomery County's public schools hired only two new special educators last year, and Prince George's County, having laid off 900 people in 1982, will not be hiring anyone. Maryland's child enrollment, though not increasing now, is expected to grow again by 1984-85.

In the wake of the layoffs, it is probable that retooled regular education teachers could bump newly trained special educators. Unemployed, certified special education teachers are seeing employment as paraprofessionals as the way to get teaching jobs later.

Massachusetts

Massachusetts colleges and universities operate preparation programs for all of the state's special education needs areas, and the quantity of preservice graduates does not fall far short of

meeting the state's needs. The state has long-standing needs for personnel in speech, language, and hearing impairments, compounded by high attrition among itinerant teachers in rural areas. Objection to itinerant service also complicates recruitment of occupational and physical therapists.

A new trend is the shortage in school psychologists, where there has been fairly high attrition, as well as budget cuts in support services and general psychological services.

The greatest special education attrition in recent years was caused by the reduction in force that followed the enactment of Proposition 2½. This attrition is due to the seniority bumping clauses in teacher contracts, by which regular educators who have more tenure and who have picked up dual certification may assume resource program positions with no more background than a practicum. There is also an enormous turnover of special education administrators who are being replaced by general education administrators. As reductions were made, special education personnel with as much as ten years' seniority were replaced by general education personnel with more years of service. All of this has created surpluses of special educators in the mildly handicapped category, largely concentrated in the eastern part of the state where some of them now work as paraprofessionals.

As is true in many other states, Massachusetts is losing math and science teachers to high technology industries. Schools are having difficulty providing computer training because of these personnel shortages, and the high tech firms have recently begun to send trainers in for direct instruction in these areas.

Michigan

Michigan has all preparation programs necessary to its certification requirements, and its new graduates meet most but not all of its personnel needs. For the 1981 school year, there were 2439 new endorsements in special education, and all but 282 of these were from Michigan's colleges and universities. The gradual increase in new personnel prepared in mental retardation is not matched by growth in this child count, and later surpluses are expected in this specialty.

Needs for new personnel are also influenced by statewide layoffs averaging at least 20 percent over the past two years. Many special educators are being pink-slipped as districts push tenured regular educators into their slots, and this phenomenon has created an open market at the universities for retraining regular educators.

Both preservice enrollment and pupil enrollment are down in Michigan, as large numbers of residents relocate in the sun belt because of unemployment and other economic pressures.

Minnesota

Cutbacks and changes in the availability of Part D federal personnel preparation monies have undermined Minnesota's capacity to supply new graduates in special education. Of particular concern is the new certification in early childhood special education; the former federally funded training project was cut, and the planned replacement program is not yet operational. A federally funded program in autism was also cut. Preservice enrollment is declining, especially at the graduate level where there are few positions for those who complete the training.

Minnesota reports serious urban and rural shortages of personnel in emotional disturbance/behavior disorders, visual impairment, hearing impairment, and physical handicaps. The manpower needs in emotional disturbance are caused not only by low numbers of new graduates but also by attrition of existing personnel as a result of burnout. Some rural areas are also short of speech personnel, but there is an oversupply in urban centers.

Changes in learning disabilities caseloads have created an oversupply of personnel in this category, which has become the major target for grouping more children together and laying off personnel. General reductions in force have created other surpluses in urban areas, and the bumping of special educators by regular education personnel with seniority has become a major problem. Regular educators who appropriate special education positions in this manner need not complete a practicum in order to obtain provisional certification in special education (although a practicum is required for full certification.)

Another distressing replacement of personnel involved physical education personnel whom the state had just finished training in adapted physical education. Laid-off regular education people have been bumping personnel whom the state had put effort into and trained for handicapped education. Several special education positions within the state department of education itself have been replaced by regular education personnel.

Minnesota's overall pupil enrollment is declining, and the enrollment of handicapped pupils is also down this year by about 2,000 out of 80,000.

Mississippi

Mississippi's colleges and universities provide training in all areas except visual impairment. A 1981 statewide survey established the number of teaching positions filled for 1981-82 and also projected needs for 1982-83. Two new certification areas were added in 1981: one for educational handicaps (which includes the mental retardation and learning disability categories), and audiology. The universities were well prepared in advance for this change, and apparent over-supplies of graduates for 1982-83 in educable mental retardation and specific learning disabilities, and apparent under-supplies in educational handicaps, will be easily adjusted by assigning new personnel according to their now more flexible credentials.

The largest shortage area reported is in personnel for emotional disturbance. Lesser areas of projected under-supply appear for personnel in visual impairment, speech pathology, and physical handicaps.

All of these projections, however, must be mediated by the fact that many Mississippi graduates go to nearby Louisiana where they can earn up to $7000 more annually with a master's degree and experience. Louisiana also offers teachers the opportunity to take one course per semester at no cost, as well as bonuses for implementing projects. Thus, while Mississippi may project some surpluses, its districts continue to report personnel needs. Considering the attrition and Mississippi's slender margin of surplus graduates, this may in fact indicate a serious shortage of personnel in many areas of special education, particularly as the handicapped enrollment increases.

Missouri

Missouri reports demand exceeding supply of new graduates due to declining numbers of students electing to enter training in special education, attrition of teachers, inadequate salaries, and lack of attractive locations. Missouri has no state-funded teacher education programs in hearing impairment or vision. Although two private institutions offer deaf education training with an oral focus, there is no preparation program at all in vision. Because such programs are expensive, they cannot be initiated without federal support; the state is providing for-credit coursework in these specialties with whatever discretionary dollars it has.

Missouri's manpower data is limited by the fact that its manpower data management system does not request positions unfilled; only actual positions and service are recorded. Assumptions are based on information gained from placement offices,

universities, requests for recruitment assistance from districts, and related evidence. In general, there is an overall shortage of all types and levels of special education personnel that is geographically specific to rural areas. Shortages that apply to both rural and urban areas are in speech/language, emotional disturbance/behavior disorders, and personnel to serve children with low-incidence handicaps. The numbers of handicapped children enrolled in the public schools remains level.

Montana

In Montana, three state universities and two private colleges prepare special education personnel. These graduates are supplemented with out-of-state personnel who apply in large numbers. Although Montana has no formal training program to prepare personnel in visual impairment, hearing impairment, or for education of deaf-blind students, this is not viewed as a problem because the number of pupils in these categories is so small that personnel needs can be met through out-of-state recruitment, particularly from San Francisco State University and Portland State University (Oregon). The same is true for occupational and physical therapists. Preservice enrollment is not declining and, because of preparation for re-endorsement, there may be some increase in overall special education enrollment.

Many school districts have staffing problems in secondary special education. Resource teachers are assigned to handle secondary students, but consultants to regular educators are also used, and regular educators themselves are becoming more proficient. Eastern Montana University has a track in secondary vocational education for the handicapped, and a second program is developing at Montana State University. Notwithstanding, the secondary arena is a locus of personnel need.

In Montana communities hard hit by the recession and unemployment (e.g., Butte, Anaconda, Great Falls and logging communities in the northwest), there have been some layoffs, but these personnel are often hired back when districts find the money. The bigger cities have more applicants than they can handle because Montana is a growth state that is attractive to applicants. In these situations, some certified teachers may be employed as aides as a means for working their way into the system.

Rural recruitment and retention remains a serious problem, and incentive salaries as high as $20,000 have not made a dent in the problem. Many districts have an annual turnover that includes their administrative personnel as well as instructional staff.

Nebraska

Nebraska's personnel needs exceed the capacity of its institutions of higher education to supply new graduates. The level of preservice enrollment is steady, as is pupil enrollment.

Nebraska is short of endorsed teachers in low-incidence areas: visual impairment, hearing impairment, severe retardation, and emotional disturbance, particularly severe emotional disturbance/autism, where the need is desperate. The demand for personnel for the severely retarded is low, but so is the supply, and the problem centers on putting them where they are needed. A statewide need also exists for secondary resource room personnel.

Out of 1100 school districts, approximately 750 have special education programs and most of these operate in rural settings where shortages continue year in and year out. Nebraska particularly needs resource room teachers and speech pathologists who are willing to go to rural areas. More than 100 positions remained unfilled for these types of personnel well into the 1982-83 school year.

There is an over-supply of special education teachers in such urban areas as Lincoln. The surplus consists of people who are unwilling to leave an urban area to find work.

Nevada

Nevada has to hire a substantial number of out-of-state personnel. The state does not have preservice preparation in vision or hearing impairment, nor in any other low-incidence area except severe retardation. Its only program for speech personnel, at the University of Nevada-Reno, cannot prepare sufficient numbers to meet critical needs. Overall preservice enrollment in special education is declining, and the pupil enrollment has declined slightly.

The state department and school districts, particularly in rural areas, have to recruit heavily each year, and in the past year even Las Vegas has been heavily involved in recruitment. Most out-of-state teachers come from Nebraska and Utah. The most acute shortage exists in speech personnel, and teachers for secondary special education are also in short supply.

Reductions in force in regular education have not affected special education. Whereas districts could slow down by not initiating programs, units not used at the end of the year can be reallocated to other districts that do initiate programs over and above what the state originally funded. Therefore, each district has a motivation to use its money for program development.

New Hampshire

New Hampshire has relatively few institutions of higher education, and the number of graduates is far from adequate to meet state personnel needs. There is no program to prepare personnel in severe retardation, multiple handicaps, or severe emotional disturbance/autism. Keene State College has developed a secondary emphasis in special education, and the University of New Hampshire has recently added a general special education program. No evidence is available to judge the status of the overall preservice enrollment in special education.

The supply of speech/language personnel, occupational therapists, and teachers of emotionally disturbed/behaviorally disordered students is short in all areas of the state. The shortage of physical therapists varies and tends to be geographically specific, as does the shortage of psychologists. There is a pressing need for secondary people in all roles, as well as needs for teachers of severely emotionally disturbed students and other low-incidence populations. Personnel in severe retardation and multiple handicaps are particularly lacking in rural districts.

New Hampshire's child count is up as people continue to move into the southern section of the state; in the north, there are only sporadic enrollment changes. Still, program growth is slow. Parents' groups have been active on learning disabilities issues, and 60 percent of the state's handicapped children are classified in this category. Personnel from the reductions in force in Massachusetts are still being absorbed into the work force, largely in the southern technology belt, where math and science teachers are leaving education for these industries.

New Jersey

New Jersey lacks preservice preparation in severe retardation and preschool education for the handicapped. Legislation in January 1982 provided for education for the handicapped from birth to age 21, permissive from birth to age 2, and mandatory from age 3 to 21. Preschool teachers will need to get dual certification, and a new endorsement is being developed.

Generically trained personnel are plentiful, but shortages of personnel in hearing and visual impairment occur. For the coming year, 27 categories of personnel have been established, from special class teacher to ophthalmologist. In all but three categories, a slight to dramatic decrease in needed personnel is projected. The increase is expected in: resource room teachers, vocational special education, and adapted physical education. The decrease is expected in: special class teacher (328 fewer will

be needed); bilingual education/English as a second language (159 fewer); school counselors (131 fewer); school psychologists (50 fewer); social workers (80 fewer); and learning disabilities teacher consultant (31 fewer). As the general school-aged population has decreased, the special education population has increased in New Jersey.

New Mexico

On the occasion of New Mexico's last university survey, 124 students were expected to graduate in special education in 1982; 124 graduates do not even take care of special educator attrition in the state, not to mention development of new programs. The state has no preparation program in vision, physical handicaps, multiple handicaps, hearing impairment, nor bilingual special education.

New Mexico's minority Mexican-American population outnumbers the dominant Anglo culture by a ratio of 52 to 48 percent. In regular education, 32 percent of the state's teachers are of Mexican-American origin, but in special education only 17 percent of personnel are members of the minority culture.

The state hires seven types of ancillary personnel; among these, there are no personnel preparation programs for occupational therapists, interpreters for the deaf, or orientation mobility specialists. Preservice enrollment is declining because of staff reductions at universities, while the handicapped pupil population is increasing as people move into the state from other areas.

New Mexico has across-the board shortages of personnel in all categorical areas and at all levels of special education. Surpluses are entirely geographical and are limited to resort areas like Santa Fe, Taos, and Ruidoso, and the metropolitan areas of Albuquerque and Las Cruces. Every other location has an exceedingly difficult time with recruitment and retention. The state education agency updates position vacancies three times a year, advertises in newspapers across the United States, and works with districts to contact potential suppliers of personnel. But the problems of manpower in rural, remote New Mexico remain unsolved, and attrition is taking care of the budget crisis.

New York

New York has 44 colleges or universities with special education preservice programs. Enrollment appears to be level, some new programs are being established, and recruitment activities have increased. There is a preservice program for everything, but not enough new personnel to satisfy all the state's needs. If

proposed early childhood legislation is passed, personnel for this area will become a manpower problem. Bilingual special education is currently a big manpower problem, which is being addressed by six colleges.

New York hires large numbers from Connecticut and is also supplied by colleges and universities throughout the northeast. Conversely, graduates from New York's university system take jobs all over the United States. The significant quantity problem is attracting people to rural areas, but rural shortages are not as severe as they have been in the past, possibly because of reductions in force in nearby states and the general uncertainties of the job market. In a recent survey of 700 school districts, 68 responded that they had difficulty with numbers of personnel; the majority expressed shortages in learning disabilities teachers, and the remainder centered on shortages in the mental retardation area. Shortages of occupational and physical therapists also exist in some areas, and it is difficult to find good people to serve autistic and severely retarded pupils.

Urban schools in large metropolitan areas present their own staffing problems. Many teachers are unwilling to work in inner cities, and special education staffing is constricted in some metropolitan areas by an absence of qualified applicants.

Reductions in force have occurred in some urban and suburban areas in both regular and special education. Some cities are reorganizing their systems because of declining resources, and this leads to layoffs. Some certified teachers have taken jobs as aides in suburban areas and, in general, New York's paraprofessionals are better qualified than ever.

North Carolina

Higher education in North Carolina comes close to providing sufficient new graduates to meet current personnel needs, and there is a preparation program to meet all manpower demands. Enrollment in preservice training has not declined, but there have been gradual decreases in the pupil enrollment in the public schools and these are expected to continue until an increase begins to occur in the late 1980's. In North Carolina, the decline in pupil enrollment will be accompanied by a drop in the number of state-allotted teachers. This implies an increased effort on the part of local districts to shift regular educators toward responsibility for handicapped learners and, in this situation, the role of inservice becomes tremendously important. Moreover, North Carolina would expect a few reductions in the size of preservice preparation statewide during the same period. The state's new

quality assurance program is a program for evaluating teachers who complete preservice training by means of written competency examinations.

Main areas of need are for personnel to serve emotionally disturbed children and gifted and talented children; both represent areas of continuing program growth. Attrition is a complicating factor in the shortage of personnel in emotional disturbance, who demonstrate a four-year turnover rate of 25 to 30 percent. Otherwise, North Carolina's turnover rate for all teachers is 6 percent, and for special education teachers it is 7 percent.

Reductions in force have not taken place at the instructional level, but two reductions have occurred among state education agency staff members. There may be small surpluses of teachers of the mildly handicapped in choice urban areas where they are willing to take paraprofessional positions in order to work themselves into the system.

North Dakota

North Dakota has no training program that prepares school psychologists, and the closest is at Moorhead State University in Minnesota. Thus, many districts purchase psychologists' services from mental health centers. There is no decline in preservice enrollment in special education, but the problem is how to increase it to meet the state's personnel needs, and how to attract high caliber people and minorities.

In the context of a general school-aged population drop, special education continues to grow. North Dakota has not yet identified its true special education population, and a number of children remain underserved. The current child count (8 percent) grows as more services become available.

The supply of personnel is adequate in mental retardation, vision, and hearing impairment. Shortages occur in personnel for preschool handicapped education, emotional disturbance, and secondary special education. Speech clinicians are in demand in rural areas, and a new shortage in severe retardation has arisen through a deinstitutionalization order that places severely handicapped children in community settings.

Layoffs of regular and special educators have taken place in both rural and urban areas, often in the form of non-renewal of contracts. Regular educators do not bump special educators because certification offers little flexibility in this direction. The state has received applications stemming from reductions in force in other states, but these have not been numerous enough to make a real impact.

Ohio

The supply and demand issue depends on geography. There continue to be personnel needs in occupational and physical therapy, especially in rural areas.

Seven years ago, 50 colleges and universities across the state had personnel preparation programs in education; today there are 48. Most train in at least one certification area, and most focus on elementary and secondary education; 33 prepare personnel in learning disabilities, and two prepare occupational and physical therapists. The training programs for occupational and physical therapists keep their programs small, and continuing under-supplies keep the salaries of these personnel elevated.

Although the general school population of Ohio has declined dramatically, the population of handicapped pupils continues to grow. Except for shortages of occupational and physical therapists and personnel to serve severely emotionally disturbed pupils, statewide manpower needs are fairly well covered. Central Ohio shows a surplus of personnel for the educable mentally retarded, as well as speech therapists and psychologists. The Deans' Task Force is reviewing areas of over-supply, and this may lead to a readjustment of training programs in the state.

In Central Ohio, 16 percent of teachers have been riffed, or 420 people across 56 school districts. Regular education teachers are retraining for special education positions because those with seniority can thereby avoid layoffs. Those who had student teaching in their earlier preparation do not have to repeat it to become certified in special education. As a result of layoffs and surpluses, some certified special educators have accepted paraprofessional positions in urban areas.

Oklahoma

Preservice programming in Oklahoma does not include preparation in visual impairments, and numbers of new graduates do not meet the personnel needs of districts in the state. First-year teachers are awarded probationary certification, undergo three evaluations by a supervisory committee, and pay to take a teacher's examination at the end of the first year of teaching. This is a factor that is inhibiting the enrollment of new trainees.

Oklahoma has shortages in most areas of special education, particularly in rural areas. Principal recruitment problems are in personnel for visual impairment and learning disabilities. Speech therapists are also a "rare breed" in Oklahoma.

The enrollment of handicapped pupils has been steadily increasing, from approximately 35,000 in 1975-77 to approximately 65,000 in 1982.

Oregon

Oregon has no preparation program in emotional disturbance/behavior disorders, and the declining preservice enrollment is unable to supply adequate quantities of personnel for state needs. The pupil population has not declined, but both pupil and professional populations are unevenly distributed, with the preponderance located in the Wilamette Valley and the remainder in the sparsely settled areas east of the Cascade Mountains.

Rural districts report a pressing need to retrain educators to teach handicapped pupils. Most districts have difficulty in hiring teachers for seriously emotionally disturbed students and there is also a shortage of personnel in learning disabilities, although the handicapped learner certification covers personnel for mental retardation, learning disabilities, and emotional disturbance. The small supplies of personnel in severe retardation and other low-incidence areas does not figure heavily in supply and demand, because there are too few services for such children in local communities.

Fiscal problems have necessitated staff reductions from the state level to the district level. Some surpluses exist among teachers of the mildly handicapped in the western section of the state, but very serious shortages continue in the east where turnover is very high, and some communities report a complete turnover of staff each year. This occurs in the face of incentives that include housing for as little as $15 or $20 per month, as well as elevated salaries in some districts.

Pennsylvania

Special education enrollment at some Pennsylvania colleges and universities has declined markedly, but the state is well served in terms of the types of preservice programs available. The only missing links at the preservice level are in severe emotional disturbance/autism (not listed on Table 1 because there is no certification category for this in Pennsylvania) and orientation and mobility training. There is, however, concern that the preservice training tracks in severe handicaps produce personnel who need further skill with low-incidence populations.

The special education pupil enrollment shows some increase. The severely mentally handicapped population, served since the Pennsylvania Association of Retarded Citizens decision in 1972,

has leveled off because all eligible children are thought to have been identified. Programs at the secondary level and in learning disabilities are the current growth areas. Consistent shortages occur in personnel for severe emotional disturbance, and, to a lesser degree, occupational therapists, physical therapists, and for personnel in severe mental handicaps, multiple handicaps, orientation and mobility, and secondary special education. Continuing difficulties in recruitment of appropriately trained personnel for severe retardation may eventually lead to significant shortages unless more trainees are encouraged to enter preservice preparation programs. Growth in programs at the secondary level has created shortages in this area also.

Pennsylvania has witnessed layoffs and program cutbacks in many communities, both in regular education and special education. Bumping of special educators would take place only within certification classifications, but districts are hiring some certified special educators as paraprofessionals. The most pressing recruitment problems are beginning to occur in inner cities, which are becoming the places where people are most unwilling to accept employment.

Puerto Rico

Until a few years ago, handicapped pupils in Puerto Rico were placed in self-contained classes, mostly at the elementary level. Since 1979, the thrust has shifted to mainstreaming and to programming at the intermediate and secondary levels, including the establishment of prevocational centers for the handicapped. Because Puerto Rico is at the beginning of this effort, the need for personnel is only now beginning to be felt in breadth and depth.

The University of Puerto Rico has had a special education program since 1965 and is a principal supplier of personnel in the San Juan area. InterAmerican University is now Puerto Rico's leading institution of higher education, operating both a graduate and undergraduate program in special education. The University of the Sacred Heart in San Juan and the Catholic University of Puerto Rico have undergraduate programs in special education and offer a few graduate courses. Puerto Rico is also supplied by two mainland universities that have campuses on the island: Fordham's Puerto Rican campus has initiated a special program for teachers of the handicapped at the request of Puerto Rico's Department of Education, and New York University's extension program offers graduate training. Preservice enrollment is increasing, and, at the graduate level, it is

heavy with practicing regular educators who have begun to demand training in education for the handicapped.

These institutions of higher education provide no program in education for speech/hearing impairment, and Puerto Rico's Department of Education is requesting the University of Puerto Rico's Medical Science Center to reopen a speech preparation program that was operated there earlier. Higher education offers adequate programs in learning disabilities, mental retardation, and emotional disturbance/behavior disorders, but formal programs are lacking in severe retardation and multiple handicaps, although some coursework is available. Thus, higher education in Puerto Rico is not presently able to provide sufficient numbers of graduates to meet all staffing needs.

The major shortage areas are in severe retardation, multiple handicaps, emotional disturbance/behavior disorders, severe emotional disturbance/autism, secondary special education, and occupational and physical therapy. Among Puerto Rico's 100 school districts, there is only one occupational therapist at the central level to serve handicapped pupils island-wide, and there are no more than four or five of these therapists working under the State Department of Education to serve children in the entire island. There are other occupational therapists, though few in number, in other agencies such as the Department of Mental Health.

Whereas the general population in Puerto Rico is declining, the special education population is growing because new services are continually being established. There are no surpluses of personnel, and new graduates will have work.

Rhode Island

Rhode Island has no higher education preparation program for occupational or physical therapists. Its colleges and universities do not supply sufficient numbers of special education personnel to meet demand, and the state recruits heavily in the Northeast. The status of preservice enrollment was not available, but pupil enrollment is level.

Occupational and physical therapists are in short supply, and there are only half as many secondary educators with special education credits as elementary educators with special education credits. When Rhode Island expands programming for secondary handicapped students in the public schools, shortages of secondary special education personnel are anticipated. The same is true of bilingual special education, for which there is no specific certification. The state has large populations of

Portuguese, Hispanic, Vietnamese, and Cambodians; few personnel are available, and many paraprofessionals are staffing programs at this point.

Some direct service teachers (mostly resource room personnel) were laid off in the past year, and many regular classroom teachers are returning to school to recertify in special education because of the threat of layoffs. These people are bumping newly certified special education teachers, as well as experienced special educators.

South Carolina

South Carolina has experienced shortages of personnel in low-incidence areas of instruction and in related services. Preparation programs in these specialties are limited. The one preparation program in hearing impairment is located at a private girls' college and is for undergraduates. Additional training programs appear to be needed for visually handicapped, hearing handicapped, multiply handicapped, and related services programs such as occupational therapy, physical therapy, orientation and mobility instruction, audiology, and others.

In addition, personnel shortages include specialists in severe emotional disturbance and severe retardation. Less intense shortages often occur early in the school year in learning disabilities, educable mental retardation, and speech impairment.

Although there was a slight decline in 1980-81 in pupil enrollment in special education, South Carolina has no surplus special education personnel. Rather, it has significant manpower problems, particularly in its rural areas, which comprise the majority of school districts in the state. Districts advertise nationally, make recruiting trips, and appeal to the state education agency for assistance.

The Teacher Certification Professional Development Act requires new teachers to be tested upon completion of their undergraduate training and again after one year of probation in the first year of teaching. A team of peers evaluates each teacher by means of a nationally validated testing instrument, a procedure which began in South Carolina in 1982.

South Dakota

Seven South Dakota institutions of higher education operate preparation programs in special education. In 1981, they produced 161 graduates in special education; of these, 83 became employed in South Dakota, 51 left the state, and the destination of the remaining 27 is classified as "other." The number of

graduates has been increasing. For example, in 1978-79, 166 people graduated in special education; 40 remained in South Dakota, 56 went elsewhere, and 20 were "other." Preservice enrollment was level in 1982.

The preparation program in deaf education at Augustana College, which collaborates with the state school for the deaf, supplies graduates to a number of other states, and so South Dakota must supplement Augustana's graduates with out-of-state recruitment. Other states also hire graduates from the University of South Dakota, and all of the state's occupational and physical therapists come from out of state. Moreover, the noncategorical training program in emotional disturbance does not include training in severe disturbance/autism.

New graduates within the state are not sufficient for new hires. South Dakota has approximately 13,200 pupils enrolled in special education (10 percent incidence) as of the 1982-83 school year, and has had a percent growth in special education each year for the past few years (while the general education population is decreasing). For this enrollment, there are 503 teachers.

Major manpower shortages are concentrated in emotional disturbance/behavior disorders, severe emotional disturbance/autism, occupational therapy, physical therapy, and speech. There are also shortages of personnel in severe mental retardation and multiple handicaps.

Reductions in force in regular education have not affected special educators, and no surplus manpower is available in special education. More problematic than recruiting teachers is the matter of retaining personnel, who apparently become burned out after several years in special education and, consequently, move to positions in regular education. South Dakota has a large number of special education certified personnel who have followed this path.

Rural districts have the most serious difficulties both in recruitment and retention. One district advertised an $18,000 annual salary (considerably more than its standard) for a speech therapist and still could not hire one. Another district advertises as far away as the New York newspapers, and districts have joined to operate a statewide job service.

Tennessee

In Tennessee, no preparation program exists in emotional disturbance/behavior disorders or severe emotional disturbance/autism, and training in this area is reported to be in need. However, there is no certification category for either emotional

disturbance nor learning disabilities but, rather, a general certification standard for "general special educator" which covers mild handicaps and which is the generic noncategorical approach for resource room teachers. Most of the state's handicapped pupils are served in resource rooms.

In the past, the state has not provided widespread educational services for autistic children, and a new definition separates them into the classification called "other health impaired." The education of deaf-blind children takes place in centers for the deaf-blind.

Most special education personnel are trained in Tennessee, where preservice enrollment appears to be level, but personnel from other states are also recruited. In major cities, manpower problems are few (but full programming for handicapped children has not yet been achieved, e.g., autistic and deaf-blind). In rural districts, demand often exceeds supply. Major needs are for audiologists, occupational therapists, physical therapists, certificated vision teachers, and speech personnel.

In response to economic downturns, program reorganizations are occurring at the district level. The child count continues to increase, and, while there have been no reductions in the special education force, some surpluses of teachers of the mildly handicapped have accrued in urban areas, and some of these are working as paraprofessionals.

Effective in July 1980, all prospective teachers in Tennessee must have completed, in an approved program, not less than one 3-quarter-hour course in education for the handicapped. This is to ensure that all teachers acquire knowledge and understanding of the learning and behavioral characteristics of handicapped children. All teachers' certificates issued after July 1, 1980, must meet this requirement.

Texas

Colleges and universities in Texas provide preservice training in all aspects of special education pertaining to state personnel certification. However, the supply of newly trained personnel is insufficient in several respects. The majority of Texas's institutions of higher education have cut the size of their graduating classes in education by half in the past three years, and enrollment continues to decline. Most graduates remain in the eight major urban areas, but 50 percent of the school districts in Texas are rural. Further, the state's pressing needs for personnel qualified in emotional disturbance/behavior disorders and secondary education for the handicapped are confounded by a

certification practice that inhibits higher education from being more responsive in supply. Texas permits a person certified in special education to teach in various categorical areas. This tends to blur the overproduction of personnel in one category and the underproduction of personnel in another.

While Texas has three preparation programs in visual impairment, this number is not sufficient for a state this size, and the supply of personnel in this specialty falls short. Fewer people certifiable in mental retardation are graduating, and school districts are asking for a great deal of assistance in bilingual special education and few people are prepared to fill the gap. Six Part D personnel preparation projects are working on the bilingual special education shortage.

These problems, coupled with a population influx into Texas and problems of attrition and rural staffing, have led Texas authorities to predict a critical teacher shortage in special education by 1984-85. The types of attrition that are occurring stem from overall transition and change both internal and external to Texas. The change rate in 1979-80 from position and location shifts and other types of personnel loss had the capacity to impact on 46 percent of special education personnel and 36 percent of ancillary personnel. In that year, it was possible to balance terminations of instructional personnel with additions but, with ancillary personnel, there were 61 percent terminations and 39 percent additions.

The relatively new teacher competency test used to evaluate applicants for certification may also be contributing to a reduction in numbers of entry-level trainees and numbers of graduates assuming positions.

Texas reports a desperate need for personnel for instruction of emotionally disturbed/behaviorally disordered students, and out-of-state recruitment efforts continue. Shortages are also serious in visual impairment, bilingual special education, and secondary education for the handicapped. Pockets of surplus personnel in urban centers represent the unwillingness and unpreparedness of newly trained personnel to work in small rural districts, whose personnel needs are chronic and unsolved.

Utah

Over a 10-year period, Utah issued an average of 453 certificates per year to special education graduates from training institutions in and out of the state. Over a three-year period, the rate of attrition is consistently 20 percent across the boards, and Utah needs 400 new teachers per year just to balance attrition.

About 10 percent of newly certified teacners leave the state each year, thus reducing the pool of available manpower by 45. In addition, female graduates from the Mormon community may never take jobs.

If Utah's manpower problems are ever to be solved, its preservice preparation programs will have to expand. Five institutions provide preservice programs. Forty percent of the University of Utah's special education programs have been supported by federal Part D funds, but the University has petitioned the Regents to replace most of these funds with state money. If this succeeds, it will salvage these training programs but the possibility of expansion is unclear. Utah State University at Logan has applied Part D funds to 30 percent of its training efforts. Weber State College in Ogden operates a training effort in resource room preparation, as does Southern Utah State College at Cedar City. The largest institution, Brigham Young University in Provo, is privately funded.

Preservice enrollment has declined somewhat in Utah, while the pupil population continues to expand. Besides the shortages of new graduates in all areas of special education, there is no preparation program in visual impairment between Greeley, Colorado, and San Francisco, California, and the University of Utah is endeavoring to gain Regents' authorization to initiate one. Neither does Utah have a preparation program in physical handicaps.

In the spring of 1981, the state ran about 100 short in its personnel needs to fill vacant positions, and it has usually run short by this number in the past few years. Problems of recruitment and attrition are most severe in the rural area away from the Wasatch Front. Personnel are needed everywhere in the state in all areas and levels of special education, most particularly for instruction of visually impaired pupils and autistic pupils.

Vermont

Vermont has no preparation program in visual impairment nor in hearing impairment. Noncategorical certification and training specify personnel to serve mildy, moderately, or severely handicapped, and teachers of the multihandicapped (severely handicapped) deal with pupils who have visual or hearing impairments. Preservice enrollment is declining, and numbers graduating in state have never been sufficient to meet Vermont's manpower needs. Consulting teachers and speech personnel with high-level graduate training tend to leave the state because of the low salary scale; the national reputation of the University of Vermont's consulting teacher preparation program also creates a nationwide market for these graduates.

The shortage of speech/language personnel is so acute that positions remain unfilled well into the school year, and there have in the past been under-supplies of consulting teachers. Among teachers of the multihandicapped, the turnover rate is high.

While the regular education enrollment has slightly diminished, the special education enrollment has been increasing gradually. A recent legislative decision means that Vermont will begin to use categorical descriptors for identification of children eligible for special education services, a move which may ultimately reduce the number of such children for which the state is accountable.

Regular education reductions in force have not affected special educators. Many regular educators are pursuing special education endorsements, and Vermont has hired some of the teachers who were laid off in Massachusetts. Even so, the numbers of teachers needed has not decreased appreciably, particularly in rural districts, and surpluses of personnel certified in mild handicaps occur only in the urban areas.

Virginia

Two universities offer training in visual handicaps, and there is one program preparing personnel in hearing handicaps. Six programs are involved in preschool education for the handicapped, offering graduate training to personnel who are already certified as teachers. New graduates from state colleges and universities are not sufficient to meet Virginia's manpower needs, and preservice enrollment is declining somewhat.

The Department of Education's Office of Special and Compensatory Education collaborated in 1982 to survey 100 percent of Virginia's school divisions, which responded by describing a range of hiring difficulties. The subsequent 1982 Report to the General Assembly concluded that the state's greatest personnel shortages occurred in mathematics, science, special education (particularly learning disabilities, emotional disturbance, severe retardation and other severe handicaps, and preschool education for the handicapped), and vocational education. Personnel for severe handicaps and preschool education are of particular concern because the supply of new people is short and attrition is high among these personnel.

Virginia's population of handicapped pupils is increasing gradually. There have been a few reductions in force in school districts but these have created no surpluses of personnel for special education.

Washington

Washington has had a teacher shortage in special education for several years. Universities are unable to prepare enough personnel to meet the demand, and graduating seniors usually have jobs lined up in the summer after their junior year. Many trainees still want to enroll in preservice training, but some state universities have had to cut back in recent years, while private colleges and universities are expanding. Besides its own graduates, Washington hires personnel from other states, particularly Oregon, Montana, and Kansas. The recruitment emphasis often involves flying out-of-state applicants in and even conducting interviews in airports.

In 1979, Washington's legislature studied the availability of special education personnel and their recruitment, the expansion of inservice to retrain personnel in areas where enrollment was declining, and other factors related to manpower supply and demand. The result was the legislature's funding of 600 state-supported positions above the attrition rate. By the time the intended year of expansion had arrived, however, the state's economy had begun to falter and the hundreds of positions disappeared. Fiscal setbacks may also bring about a leveling off of district services and a subsequent leveling off in the identification of handicapped pupils, although the pupil enrollment has grown steadily in the past.

Three-fourths of the handicapped school population is behaviorally disordered, learning disabled, or speech impaired. The greatest shortage is for personnel to serve these children at the mild to moderate levels. Many vacancies also persist in secondary special education. Increased preparation of regular educators to serve the mildly handicapped is needed in order to direct remaining resources to the greatest special education needs.

State officials have identified several factors that influence attrition among special education personnel. First, Washington experiences what most states do in terms of trained teachers working with less severely handicapped students over the years they teach, inasmuch as they can get the same pay for easier, more fulfilling work. This is a form of burnout. Second, Washington requires that all teachers be qualified in regular education. Those who wish to teach only the handicapped must commit themselves to extensive regular education training that they do not intend to use, and this restricts the availability of special education teachers. Third, when fiscal policy limits open positions in regular education, it can also prompt personnel

to put in time in special education simply to get in line for the regular education job they really wanted in the first place. Funding limitations also pose problems when salary budgets are limited and pressure builds on a system as more children are identified as needing service.

West Virginia

West Virginia's institutions of higher education are not producing enough new people to meet the state's personnel needs, and the teacher education enrollment has declined between 50 and 60 percent over the past ten years. The state has no preparation program in hearing impairment or visual impairment, and personnel in these areas are trained through Western Maryland College, Gallaudet College, and a cooperative program with George Peabody College of Vanderbilt University in Tennessee. Since certification specifies comprehensive service with mild, moderate, and severe handicaps in each categorical area, there is no generic certificate.

An experimental program has been approved at West Virginia University for personnel associated with severely handicapping conditions, in order to meet needs in this area of exceptionality and to provide certification training to personnel working in the state's institutions. In the past, there has been little practicum opportunity with severely handicapped pupils in the public schools.

As of September 1985, all graduates entering the teaching profession will have to meet a proficiency level on a statewide criterion-referenced test in their specialty areas, as well as in basic skills and professional education performance assessments. This is a move toward product orientation for teacher education programs, as the test will not be used solely for certification purposes, but, rather, for successful completion of a college or university training program. The instrument will specify the skills and knowledges needed for practice in the schools; in administering the test, preservice programs are to use its results diagnostically and prescriptively, with reference to the public school curriculum.

In terms of current shortages, the dominant need in West Virginia is in specific learning disabilities, followed by emotional disturbance/behavior disorders and mental retardation. A number of vacancies are also reported in speech pathology (limited by the stringent American Speech, Language and Hearing Association standards that are used) and in school psychology (in which School Psychologists Association standards are used).

Pupil enrollment is decreasing at the elementary level and increasing at the secondary level, a trend that is expected to reverse itself later in the 1980's. The special education population is not decreasing, and the teacher shortage becomes more acute as child find activities succeed and more services are provided. In West Virginia, the retraining of current teachers is seen as the major step toward solving manpower problems.

Wisconsin

Wisconsin's colleges and universities are not turning out sufficient numbers of graduates, particularly in emotional disturbance, learning disabilities, severe retardation, multiple handicaps, visual impairment, physical therapy, occupational therapy, and speech/language. Preservice enrollment is declining, and the University of Wisconsin-Milwaukee is particularly concerned with the drop in both regular education and special education enrollment; students are going into more lucrative fields and are also affected by the news of budget cuts and reductions in force.

The state's institutions of higher education do not offer training programs in visual impairment or orthopedic impairment. Recruitment for personnel in these and other areas covers many states, and personnel are drawn particularly from Northern Illinois University in DeKalb.

Major shortages concern personnel in emotional disturbance/behavior disorders, learning disabilities, severe and profound retardation and other severe handicaps, speech/language, and secondary special education.

Reductions in force have taken place among regular educators in some urban areas, but regular educators are unlikely to bump special educators because it is not easy to recertify: the entire training sequence, including practicum, is required. Nearly 70 people have been laid off in the state education agency, including some special education personnel, and more cutbacks are anticipated.

Special education surpluses that do exist are being absorbed, at least in part, by the state's movement into early childhood handicapped education and multicategorical programs. Some surpluses of personnel in mental retardation continue to be reported.

The general pupil population decreased by about 200,000 between 1973 and 1982. Special education enrollment increased from 53,000 to approximately 87,000 during the same period, and overall increases in the pupil population are expected later in the decade.

Wyoming

Wyoming has one generic preservice preparation program, staffed in 1982 with five people and reduced to four in 1983 (located at the University of Wyoming in Laramie). The program does not specify training tracks with specialty emphases, and the only speciality training that students may have takes place in their student teaching. Although the University people recognize that this is a problem, rural areas are in need of personnel with K-12 resource room certification, and so there is little stimulus to modify the preparation program. Wyoming graduates are supplemented with out-of-state personnel in order to meet manpower needs.

Wyoming reports a great need for occupational therapists and a somewhat less pressing need for physical therapists and diagnosticians. Personnel and public school services have been directed primarily toward pupils with mild to moderate handicaps. Thus, the need for specialists in emotional disturbance and severe handicaps has been curtailed by limitations on the provision of these services in the public schools; however, efforts to meet needs at the local level continue.

The overall pupil enrollment and the special education enrollment are stable, and the definitions of handicaps and of special education are becoming more strict. Surpluses of special education teachers are rare, occurring only in the more populous areas. Surpluses from other parts of the nation are having a positive effect in Wyoming, which is hiring people from Wisconsin, Michigan, Illinois, and several eastern states. This has created, for the first time, a buyer's market for some rural districts, and the qualifications of these out-of-state people may stimulate others to upgrade their skills.

Discussion

The information in Chapter 3 has shown a general shortage of many types of special education personnel, and a serious shortage of certain types of personnel: occupational therapists, physical therapists, speech clinicians, teachers of students who are emotionally disturbed/behaviorally disordered, severely retarded, severely emotionally disturbed, multiply handicapped, visually handicapped, hearing handicapped, and personnel to work with students who need secondary special education programs. Not all districts are equally affected by these shortages. Respondents (as well as documentation from some jurisdictions) state that the districts most seriously affected are those with

relatively low local wealth, isolated rural settings, inner city schools, and those far from teacher education institutions. Such districts and schools cannot compete successfully with more advantaged districts in the recruitment of personnel.

The obvious conclusion is that some problems of manpower shortage cannot be solved by preparation of additional numbers alone, but also require new approaches to personnel preparation, recruitment, and community support of personnel. Respondents agreed on the need to tailor preservice training to the specific contexts and characteristics of consumer needs in the service areas of training programs; the need for higher education to work cooperatively with school districts to plan effective training and practical experiences for trainees in the service area; and the need to create stronger systems of community support for the retention of special education personnel, most particularly in rural, remote, and inner city areas where many are currently unwilling to accept employment. One recommended strategy is the preparation and deployment of *teams* of new graduates (rather than of one lone individual from a given training program) to rural, remote, or inner city employment, so as to lessen feelings of isolation and lack of common values and life styles that often interfere with personnel retention in such districts.

Although alternatives such as these are imperative to the solution of manpower shortages in certain geographic and socioeconomic settings, they do not rule out the apparent need for some additional personnel preparation programs and/or for increased production of new graduates to reduce widespread and severe shortages reported for certain types of personnel. Figures from the federal Special Education Programs office (Saettler, 1983) show that approximately 22,000 new personnel are expected to graduate from higher education special education programs in 1983-84 (presumably from the 698 programs identified by Geiger in 1983), but that the current rate of attrition among practitioners in the field is 25,000 annually. Responses to this survey indicate that the difference between supply and demand may be even greater because some of the 22,000 currently scheduled to complete higher education may not represent new personnel for the work force but may, in reality, be employed personnel who are working to move from their current status of provisional certification, or who have returned to school to satisfy new, more stringent certification requirements.

Another problem with preservice enrollment numbers is the lack of graduate follow-up reported in this survey, which raises the question of how many eventually enter the special education

profession. Information gaps are compounded in some cases by poor communication among institutions of higher education, state education agencies, and local districts. Some jurisdictions report that it has not been possible to gain information on the supply of new graduates in the pipeline, although the demand side of the manpower data system is furnishing comprehensive data. Turf issues between various state department bureaucracies can also reportedly interfere with the efforts of state special education agencies to gather data from higher education.

Some personnel shortages may decline as new hires continue to be eliminated in certain jurisdictions and as programs are spread more thin as a result of financial cutbacks. Attrition may decline somewhat in the uncertainties of the general job market. Further reductions in force may curtail the demand for (but not the true need for) some personnel, and thus create further small surpluses of the sort reported in this chapter. These surpluses, however, pertain exclusively to personnel for the instruction of mildly to moderately handicapped students, rather than to the more widespread and serious shortage classifications. Surpluses of personnel and over-supplies of new graduates, both now and in the foreseeable future, appear to involve teachers of mildly handicapped students. For example, though a few jurisdictions have difficulty finding teachers of educable mentally retarded students, others predict a future surplus of these personnel because student and instructional definitions are diversifying, yet the number of new personnel for this handicap continues to increase in some places.

These influences on manpower demand are not expected to solve problems of supply that are currently pressing, particularly when preservice enrollment is declining in 29 of the 54 jurisdictions reporting. The depopularization of public education in politics and the press, and the accompanying federal, state, and local fiscal incursions into educational resources, have been reported by participants in this survey to make a career in education seem less than promising to prospective trainees. They are not eager to assume the image of "least able and least intelligent" that has of late been assigned to those who enter teacher training and teaching, nor do they have great confidence that they can get jobs when they graduate. Many who might otherwise enter special education are, therefore, preparing for other professions that are more lucrative, seemingly more secure, and more respectable. The other side of the coin is that higher education has suffered from program cutbacks and reductions in force, thus limiting the program options and admissions

slots available to those who do wish to pursue teacher training. Given the three to four year lag under which universities operate, by the time they reduce production to match current conditions and economic constraints, the demand for teachers will again be on the increase (as suggested by jurisdictions' demographic data and by pupil enrollment projections for the remainder of the decade). The entire picture that emerges suggests that the gap between supply and demand will probably continue to widen in the 1980's.

At the same time that information reported in Chapter 3 suggests current and future shortages of personnel in many teaching specialties and in certain geographic and socioeconomic settings, it also raises questions about the quality of personnel and, hence, the quality of services. In and of itself, any limitation on numbers of available personnel promotes mediocrity because it limits selectivity. As one survey participant put it, "the federal government used to tell us to train only the numbers that were actually needed. But then you have to take the mediocre, as well as the excellent. We don't want everyone to enter the profession; we would like to have only the good ones."

Some of the "good ones" may also fall victim to reductions in force which enable less qualified teachers with seniority to replace newly certified special educators whose recent training was quite possibly more comprehensive and stringent than that offered in the past. Quality control also has suffered from reductions in force that have occurred in state education agencies, where their deleterious effects have included diminishment in the capacity to coordinate and deliver inservice training, offer technical assistance, coordinate the Comprehensive System of Personnel Development, and monitor district programs.

The impact of the teacher tests, competency-based certification procedures, and other innovations introduces another juncture where issues of quality and quantity converge. On the one hand, it is possible to increase the number of available personnel by reducing the standards for their competence, thereby placing less competent personnel in many classrooms. This makes mediocrity its own reward, since no stimulus is created to make changes in preservice preparation, nor to raise the caliber of people entering preservice training or the profession, nor to change the status quo of public education. On the other hand, it is possible to reduce the number of available personnel by increasing the standards for their competence. When manpower shortages are extreme, this option will result in vacant positions, unless other measures are taken to eliminate them (for example,

increasing class sizes or case loads; supplementing the staff with personnel who are less than fully qualified), and these measures tend to cancel out the benefits of more competence by negatively affecting other conditions that influence learning. This option also makes competence its only reward, since it changes none of the other factors that would compensate the competence that is sought (such as recognition and reward for merit, greater respect from parents and the public). Against this background, a first step toward improving education would involve preparing and deploying a very adequate supply of qualified personnel so that standards of competence could be raised (not lowered), so that the work force would be composed of skilled and knowledgeable (not marginal) personnel, and so that merit (not mediocrity) might be recognized and rewarded in the profession of teaching.

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Chapter 4

From a Programmatic Viewpoint

This chapter presents results of the survey that demonstrate the effects of problems in manpower supply and demand reported in Chapter 3 and the effects of economic conditions in jurisdictions, as reported in Chapter 2. These issues are explored *with quality of educational service as the criterion*. The purposes are:

- To explain current trends and policies related to student:teacher ratios in special education;
- To review interdistrict and interagency efforts to solve manpower and fiscal problems;
- To highlight trends in the delivery of service for the education of pupils with low-incidence handicaps and of pupils with mild to moderate handicaps; and
- To present overall findings concerning the provisional certification of personnel.

The final portion of Chapter 4 sets forth narrative statements from jurisdictions on the matter of provisional certification of personnel and related procedures for filling vacant positions when fully qualified manpower is not available. The chapter concludes with an overview of some jurisdictional activities in quality assurance and a discussion of all findings relevant to the impact of personnel shortages and fiscal reductions on the quality of education for the handicapped.

Student:Teacher Ratios

Participant contributors from each jurisdiction presented information on the ratio of handicapped students to teacher (or other educational staff member or therapist) for different instructional groups and modes of service delivery. These reports showed great variation because of the differing personnel categories, position descriptions, and instructional levels, groups, and settings used among the jurisdictions.

Each jurisdiction does have concern with the ratio of handicapped students to instructional personnel, and each reported descending proportions of students per employee in relation to the severity of students' handicaps. For the purposes of this report, emphasis is directed toward the stability of the student:teacher ratios that prevail, rather than toward a delineation of the actual ratios in practice within individual jurisdictions.

The Authority for Student:Teacher Ratios

Among 54 jurisdictions, 36 reported that student:teacher ratios emanate from such authority as formalized state policies and procedures, state administrative rules, state regulations, state code or statute, state board of education standards, superintendent's directive, official state requirements, or local territorial law. In a few cases, ratios are also part of the language of teachers' union contracts.

In the remaining 18 jurisdictions, guidance on the ratios of handicapped students to instructional personnel is less formalized, as shown below.

**Alaska.* The state education agency has issued informal guidelines.

**Arizona.* Districts' governing boards establish their own class loads and case loads.

**Arkansas.* The state education agency's Program Standards and Eligibility Criteria for Special Education set forth ratios.

**Bureau of Indian Affairs.* Proposed standards for Indian schools have been prepared and are being reviewed by the U.S. Department of the Interior's Legal Office. Meanwhile, BIA schools are governed in this matter by educational guidelines, the *Bureau of Indian Affairs Manual*, and regulations of states or districts in which these schools are located.

**Connecticut.* Districts establish their own student:teacher ratios.

**District of Columbia.* A set of unofficial guidelines on student:teacher ratios is contained in the State Plan.

**Florida.* Districts establish their own student:teacher ratios.

**Indiana.* Statements of maximum case load numbers were removed from the state regulations as revised in 1978.

**Kansas.* Student:teacher ratios are contained as guidelines in the State Plan.

**Montana.* The state education agency has issued informal guidelines; specific minimums must be reached before additional state funding for new positions is approved.

**North Dakota.* The state education agency has issued informal guidelines.

**Oregon.* The state education agency has issued guidelines for districts.

**South Dakota.* The Individualized Education Plan (IEP) becomes the student's program, and the ratio of students to instructional personnel is determined on the basis of the IEP.

*Tennessee. In the absence of current guidelines, the state education agency is writing a best practices manual for districts, with service development options for student:teacher ratios.

*Texas. The Texas Education Agency had student:teacher ratio guidelines until 1982, but new State Board of Education rules issued on August 11, 1983, have changed this, and Texas now has no state guidelines concerning student:teacher ratios.

*Utah. The state has issued formal guidelines.

*Washington. The state education agency has issued informal guidelines.

*Wyoming. Districts establish their own student:teacher ratios.

In the majority of jurisdictions, student:teacher ratio statements are intended mainly to ensure program quality. Where student:teacher ratios are not tied to funding, jurisdictions use funding formulas based on numbers of children counted, or on numbers of personnel employed, rather than on the proportion of one to the other. A departure is the example set by South Dakota, where the IEP becomes the instructional program and placement for each student, and all allowable costs are reimbursed by the state.

In 16 jurisdictions, the ratios are tied to the funding pattern as well as to program monitoring, or are used exclusively for funding purposes. In Idaho, for example, if districts exceed the ratios set forth in the State Code and Regulations, then districts must pay for the excessive numbers of pupils assigned to personnel.

Rationales Behind Student:Teacher Ratios

In 39 jurisdictions, respondents had little or no information as to precedents or rationales that were used in developing the student:teacher ratios that are set forth. In the majority, this lack of information reflects the fact that the student:teacher ratios were developed some years ago and are thought to have evolved through professional consensus or "armchairing."

Among the 15 jurisdictions in which precedents or rationales were described, four based their ratios on surveys of national practice (which were not always described as totally useful), and some supplemented such data with standards of professional organizations (notably the American Speech, Language and Hearing Association) or on the scant research on appropriate class or case loads for the instruction of various types of students (for example, effectiveness data from the University of Vermont concerning consulting teacher loads).

Five jurisdictions reported the use of professional task forces and/or statewide surveys to gather information for use in determining ratios. In Nevada, a 100-member task force studied practice in districts throughout the state and developed recommendations, which were presented at public hearings for comment by teachers, parents, administrators, and representatives of higher education. In West Virginia, ratios were developed by statewide task forces and the state's Advisory Council on Special Education. In five other jurisdictions which described background work leading to the determination of student:teacher ratios, the general procedure has been to base state guidelines on district practice and/or to elicit professional reaction to policy papers.

The notable exception in the development of student:teacher ratio standards is Virginia, where work is in progress to substantiate student:teacher ratio practices. The Virginia activities began in 1980 with two surveys of teachers, parents, principals, and other administrators in a case study strategy. One survey focused on instruction of mentally retarded students, and the other on speech instruction. The results of these efforts have brought about a downward change in student:teacher ratios for the educable mentally retarded and have also led to a recommendation for severity rating scales in determining the case loads of speech clinicians. Now the Virginia Department of Education is planning a pilot study to determine whether greater instructional effects are achieved when fewer students are assigned to instructional groupings.

Although two other states have plans to revise their student:teacher ratios and are seeking information and best practices to use in this effort, the fact remains that, in the overwhelming majority of instances, the ratios in use are vaguely based on tradition and frequently stem from decisions that were made many years ago, often before the enactment of Public Law 94-142. This situation suggests that establishing a substantive basis on which to predicate optimum and maximum class and case size in special education should become an immediate priority, particularly in view of the changes that may be attempted as fiscal resources become more scarce.

Authorization for Exceptions to Student:Teacher Ratios

The policies of the 54 jurisdictions regarding the matter of exceptions to, waivers of, and variances or deviations in student:teacher ratios by school districts are shown on Table 6. The first column displays the 18 jurisdictions which have no formal regulated authority for student:teacher ratios; of these, four

Table 6. Mechanisms for Requesting Exceptions to Student:Teacher Ratios

	NO FORMAL REGULATIONS	REQUESTS TO DEVIATE NOT NECESSARY	REQUESTS TO DEVIATE ALLOWED	NO DEVIATIONS ALLOWED
Alabama			X	
Alaska	X			
Arizona	X			X
Arkansas	X		X	
California			X	
Colorado			X	
Connecticut	X			
Delaware			X	
Florida	X			
Georgia			X	
Hawaii			X	
Idaho				X
Illinois			X	
Indiana	X			
Iowa			X	
Kansas	X			
Kentucky			X	
Louisiana				X
Maine			X	
Maryland				X
Massachusetts			X	
Michigan			X	
Minnesota			X	
Mississippi			X	
Missouri			X	
Montana	X		X	
Nebraska			X	
Nevada			X	
New Hampshire			X	
New Jersey			X	
New Mexico			X	
New York			X	
North Carolina			X	
North Dakota	X			
Ohio			X	
Oklahoma			X	
Oregon	X			
Pennsylvania			X	
Rhode Island				X
South Carolina				X
South Dakota	X			
Tennessee	X			
Texas	X			
Utah	X		X	
Vermont		X		
Virginia			X	
Washington	X			
West Virginia			X	
Wisconsin			X	
Wyoming	X		X	
Guam			X	
Puerto Rico		X		
BIA	X			
Distr. of Columbia	X			
N =	18	2	33	6

nonetheless have a mechanism whereby districts request exceptions to ratio guidelines from the state education agency. This leaves 14 jurisdictions in column 1 in which no formal request from districts is presumably necessary, as well as the two additional jurisdictions shown in column 2 where formal authority is present but district requests for deviations are not required. Among the 33 jurisdictions (column 3) where districts may request exceptions to regulated or informal student:teacher ratios, three reported limitations to specific fractions over the established ratios, and still others reported that a teacher's aide is required when ratios are exceeded.

The total national picture that emerges from all of this is one in which all but six jurisdictions (column 4) are vulnerable to increases in class and case loads, and nearly all jurisdictions lack strong and substantive evidence to support existing statements of student:teacher ratios in special education.

Tilting of Student:Teacher Ratios

Evidence of increases in class or case loads comes primarily from increases in the number of requests for exceptions in student:teacher ratios. The number of requests for deviations may increase or decrease as a function of manpower supply and demand and as a result of rule changes. Other evidence comes in the form of increases in teacher complaints about overloads, observations gained in state monitoring of districts, staffing changes discernible in district budgets, and in efforts documented by education agencies to provide services to children in the face of manpower recruitment problems.

In several jurisdictions, still other evidence comes from administrative or legislative actions designed to increase the numbers of handicapped students per teacher in specific or general ways. In Arizona, where districts' governing boards set their own ratios, a measure is being taken to increase case loads in learning disabilities. This is the contributing factor in the small surpluses of learning disabilities teachers in Arizona, as reported in Chapter 3.

In Michigan, the acting emergency rules under which the state is currently operating allow for larger numbers per class at the secondary level and have also permitted a relaxation of the age-span limit for members of instructional groups, particularly at the secondary level.

In 1981, in the wake of Proposition 2½, Massachusetts authorized an across-the-boards increase in special class size by 2, on approval of district special education directors. Massachusetts'

even more dramatic increase in regular class size also affects mildly handicapped students receiving education in regular classrooms, for less individualization will be possible.

During its January-March 1982 session, the Minnesota state legislature passed a bill to increase all student:teacher ratios in special education and regular education by 20 percent for the 1982-83 school year. This increase was scheduled to continue in effect until the state education agency drafted new proposals for some compromise in the issue of ratios—a process that requires regional meetings and a state board decision before the legislature's scheduled meeting in 1983.

Michigan, Massachusetts, and Minnesota are, of course, states in which districts may still request exceptions to the newly raised student:teacher ratios. Moreover, legislative information from several other jurisdictions suggests that other states may take up the matter of more stringent and limiting definitions of handicapped students and accompanying issues involving student:teacher ratios, as budget deficits continue.

Among the 54 jurisdictions reported in this study, 26 reported evidence that student:teacher ratios in actual classrooms are either increasing or had reached maximum allowable limits on the average—with numbers exceeding the maximum in some or many settings. Reports from these 26 jurisdictions indicate that, without question, educational staffs are being stretched further and further. These jurisdictions report that further fiscal cutbacks would throw more class or case loads into a full-tilt situation.

Most of the exceptions reported relate to shortages of personnel, to recruitment problems, or to cases where a small number of handicapped students represents an overload for one teacher but not of the size that is thought to justify another full-time employee. Overloads often distort from one part of a jurisdiction to another because recruitment is more difficult in rural and inner city schools than in other geographical locations.

In other cases, exceptions are related to reductions in force and other budgetary actions that have reduced human resources without a corresponding decrease in the handicapped pupil population, and this type of overload is more likely to occur in metropolitan centers than in rural areas. In one jurisdiction, the increasing ratio applies only to speech personnel. In another, it applies only to homebound teachers. Otherwise, the increases reported in student:teacher ratios apply to special education teachers and staff overall.

Respondents from six jurisdictions did not have access to evidence as to the current status of student:teacher ratios.

Twenty-two (including the six in which exceptions are not permitted) reported no alarming increases in student:teacher ratios, but five of these stated that further budget cuts would be likely to bring about such increases; one expects exceptions to increase markedly in 1983-84 due to proposed budgetary reductions; and another predicts legislative decisions that may alter existing ratios.

In only two of these latter 22 jurisdictions is there any evidence that the ratio of handicapped students to instructional personnel might change in a positive direction. Pennsylvania reported that the number of exceptions requested by districts had decreased in the past year, while West Virginia's proposed rule changes call for a smaller number of students per teacher.

Interdistrict and Interagency Efforts to Solve Manpower Problems

Jurisdictions report a number of strategies for solving manpower problems and for dealing with declining fiscal resources. Contracts for the services of certain specialists have long been used in rural areas, but are now increasing, for budgetary reasons, in urban centers. The establishment of cooperatives and consortia among school districts has made expansion of services possible in many rural areas and, in some cases, these cooperative arrangements involve metropolitan districts in the education of rural children. Other efforts to supply instructional and related service personnel include the provision of itinerant specialists over large expanses of rural America, the deployment of consultants who remain in remote districts for extended periods to work directly with children and personnel, and the provision of technical assistance by state education agencies (a service that is, however, becoming extinct in many areas as reductions in force take place in state departments of education).

Contracts for Services

Virtually all jurisdictions report occasions of contracting for the services of certain personnel for the education of handicapped students. The preponderance of contracts are issued for the services of related service personnel, including occupational and physical therapists, audiologists, interpreters for the deaf, orientation mobility specialists, psychologists, mental health personnel, social workers, nutritionists, and others.

Related services. Among the related services, the greatest number of contractual arrangements involve occupational and physical therapists. These and other related services are fairly new to education and have been more uniformly offered in urban centers than in rural areas. Recruitment difficulties stem from occupational and physical therapists' affinity for working within the medical profession, from their limited experience with educational service delivery systems, from their resistance to the itinerant mode of practice as it is expressed in rural areas, and from the disparity between school district salary scales and their own earning power (which is often as high as $25 per hour in nursing homes and hospitals).

These factors become almost prohibitive in the rural quest to provide related services. Even when therapists and other personnel can be found, their participation is surrounded by inordinate expense and logistical complications. For example, New Mexico has three criteria for the funding of related service personnel: travel from point of origin, preparation, and direct service. If a district has a six-hour day and a physical therapist spends two hours in travel and one hour in preparation, that leaves only three hours for direct service but justifies one FTE (full-time employee). "To meet these needs overall should take 50.33 FTE, but this figure doesn't really work because it represents 89 school districts spread so thin that you really need more. For another example, we have an aggregate need for 2.90 interpreters (based on fractions of full-time service needed in various districts). But we need half of them here, half of them there, and so forth. The numbers just don't meet the needs." These remarks apply to the deployment not just of related services but of all personnel in rural areas, and not only in New Mexico but in all states with large rural or remote areas. The aggregate FTE numbers that can be used to demonstrate demand do not reflect the actual need because personnel cannot be divided among all of the districts where the demand is occurring with slight to significant intensity.

In response to these complexities, many jurisdictions would no doubt endorse the position evolving in Maine, where "the schools are considerably more discriminating about the services of occupational and physical therapists because of costs and limited availability. There was at first a mystique surrounding these services, but now special educators and elementary teachers are performing many occupational and physical therapy functions."

The magnitude of problems with the therapies in the states, however, is nothing compared with what is experienced in the

territories surveyed, nor in the Indian schools. In Puerto Rico, there is not simply a shortage. "Only one occupational therapist is available at the central level to serve handicapped pupils island-wide, and there are no more than four or five of these therapists working under the State Department of Special Education to serve children in the entire island. But there are 100 school districts in Puerto Rico."

Until two years ago, occupational and physical therapists were not to be found on Guam, either. When due process brought about pressure to correct the consequent lack of services, the Guam education agency had to go to the Philippines to negotiate a contract for certified therapists, who have been brought back to Guam where they are now classified as alien workers. And the Bureau of Indian Affairs reports a virtual crisis in the recruitment of related service personnel for its schools, all of which are located in rural or remote regions.

Other contractual arrangements. Several states report the use of contracts for speech correction services, and, in South Carolina, there are some instances of contract agreements with teaching specialists. This is also true in Alaska, which makes contractual arrangements for instructional services to emotionally disturbed pupils in some of its districts. Moreover, in Alaska, all emotionally disturbed students must be under the care of a psychologist, psychiatrist, or other mental health professional on a regular basis—a measure of particular importance in remote districts where there may be only one such student who is taught by a generalist, rather than a specialist. These areas, however, are often the most removed from the source of such services. In the larger villages, the Department of Social Service's Division of Mental Health has service units, and contracts for service can be negotiated with these branch agencies.

A new trend in contractual arrangements is reported in Minnesota, where some rural districts have begun to assign administrative responsibilities in both special education and regular education to the same person, with special education administration expected to consume possibly one day per week. Thus, some of Minnesota's cooperatives are now contracting for the hourly services of special education directors to complete paperwork and other administrative duties.

It is impossible to leave this topic without adding that, in many areas of the United States, school districts have reportedly traditionally assigned special education responsibilities to regular education administrators, rather than those trained as directors of special education. Where this is the practice, it is done for lack

of suitable personnel, or because of the small incidence of identified handicapped children in a small district, or for budgetary reasons, or because of the propensity of some districts not to employ an advocate for the handicapped in the administrative position.

Another new trend, reported by Illinois, is a budgetary move by urban districts to release school psychologists and other related service personnel, then hire them back on an hourly basis without tenure or fringe benefits. In Illinois, therefore, private practice among school psychologists is burgeoning.

In many areas, private agencies and business enterprises are engaging more and more in contractual arrangements with districts to provide inservice teacher education. The quality of these services appears to be quite variable, depending on the provider, and is questioned particularly by higher education. Further, in the high technology belt adjacent to Boston and southern New Hampshire, the commercial technology industry is reported to be sending specialists into the schools to provide direct instruction (after having drained off math and science teachers), and this phenomenon may well be occurring elsewhere. Considering that these technologies are already creating new media for educational purposes, it would be well to consider their equal and imminent capacity to create the content and deliver the services, as well.

Cooperatives and Consortia

In rural districts, manpower shortages have traditionally interfered with educational continuity, quality, and expansion. For one thing, the level of education of the population is different from that of cities, which can draw on the spouses of more professional people to fill teaching positions. Rural populations in some jurisdictions are described as non-assertive and exerting little pressure to change the status quo. In addition, most colleges and universities are situated in urban centers or in small towns that have been made relatively sophisticated by the impact of the higher education community and the extended cultural and educational activities of the University. As a result, preservice trainees are not prepared to function in rural areas, and they have little or no opportunity to experience rural education nor to experiment in developing rurally relevant curricula, assessing the instructional needs of rural students, becoming sensitive to the rural environment, or engaging in cooperative efforts to bring about full services for handicapped students. Also

of concern in places like Nebraska (with 1100 mostly rural districts) and Montana (with 556 mostly rural districts) is the isolation of personnel working in these communities and the lack of communication that could relay the stimulus and means for school improvement. These are problems that can never be solved by manpower surpluses alone, even if sizable surpluses did exist.

It is for these and other reasons that many school districts participate in multi-system cooperatives, consortia, or joint agreements. Some of these arrangements exist only for coordination of services like mental health, but, in most cases, cooperative arrangements are paramount in recruiting and deploying personnel to achieve fuller service (i.e., to send itinerant personnel, shared among districts, to children), or to establish central locuses of special education services (i.e., to send the children to the educational personnel). Cooperatives can also provide inservice training and retraining for new roles, as is the case in Wisconsin where needs for personnel to serve low-incidence populations of handicapped children have become a pressing priority. There, the University has applied for a grant to bring together people from rural colleges to provide rural teachers with training in education of these children, and the state education agency is working on a rural delivery system for providing these services once the personnel have been prepared.

Cooperatives can also provide communication and consultation among districts and their personnel for purposes of program and school improvement, and can make possible assorted other functions that an individual district might not be able to accomplish or justify or afford on its own. Indeed, through cooperation, some of the most rural districts in Georgia are reported to have the most comprehensive programs of special education.

Many of the jurisdictions surveyed reported cooperative arrangements among some of their districts. Where cooperatives are few or non-existent, several factors may inhibit their development. In many parts of the country, there are reports of a movement toward local control of money and decisions, with growing resistance to less than autonomous operation. In a few rural communities suddenly made rich by oil revenues or other economic booms, there is no stimulus to share the wealth. Moreover, issues of turf are, in and of themselves, inhibitors to cooperation.

Cooperative arrangements also seem easier in states that are organized into educational regions (such as the eight regions into which North Carolina is divided), and one unregionalized

state reports "just 550 districts—struggling." Many respondents also believe that intermediate unit administration (such as that in Pennsylvania, Wisconsin, and New York's Bureaus of Cooperative Educational Services, or BOCES, to name a few) provides a better vehicle for sharing and deploying educational resources than does county administration. In a striking move away from cooperation, California's fiscal cutbacks have prompted its county offices to cut their special education programs and turn them over to their districts.

In a few jurisdictions, distances are so vast that joint operation among districts is generally precluded. In Alaska, even when districts are in relative proximity, the severity of weather conditions during much of the school year prohibits the movement of personnel or children from one village to another.

Alternative models. In some jurisdictions, centralized statewide technical assistance, teacher education, and/or direct instruction are provided over rural and remote areas. Alaska Resources for the Moderately and Severely Impaired is a nonprofit agency that was in 1982 awarded a major contract by the State of Alaska to deliver training, technical assistance, and instruction to schools in Alaska's remote and hard-to-reach bush villages. The staff, deployed by small plane, dogsled, and other means, has reached 192 handicapped children in these villages, many of them Eskimo, Indian, or Aleut, and still more are being identified and served as the work of the project progresses.

The Nevada Department of Education operates a Rural Assistance Project, which provides personnel training and a variety of other services. It is staffed by consulting teachers, university personnel, and professionals from the mental health community, who are deployed to rural districts across the state.

South Dakota established a project for retraining residents of rural districts who would have reason to remain in these communities. The project recruited persons with bachelor's degrees in regular education and retrained them in education for the handicapped on leave from their home districts. Training took place on the University campus in the summer and fall, and then trainees would return to their districts and begin to set up classrooms for handicapped students, with the support of 18 hours of direct on-site supervision and a telephone hook-up back to the University. Although "it was not easy getting mom to leave home," South Dakota produced 12 or 13 rural teachers this way during the year that the project was funded by a Part D grant in personnel preparation. When a new cycle of the grant was not approved, other available funds were not sufficient to continue it.

Busing of Severely Handicapped Children

Cooperative services in special education focus most frequently on providing an education for children with severe, multiple, and sensory handicaps, for it is in these service areas that rural personnel shortages are acute and it is these children whose incidence is lowest among the school population. The solution in many cases is to provide educational services in a central location to which children are brought, and this means busing. Considerable busing of handicapped children is reported by the following 21 jurisdictions:

Alabama	North Dakota
Arkansas	Ohio
California	Oregon
Georgia	South Carolina
Illinois	South Dakota
Kansas	Tennessee
Louisiana	Vermont
Maine	West Virginia
Montana	Wisconsin
New Hampshire	Bureau of Indian Affairs
New Mexico	

California law specifies the time a child may spend on a school bus, while Georgia's regulations limit bus time to 1½ hours per day. In Illinois, transportation of children is limited to a distance equal to a staff move, and Louisiana requires busing to the placement closest to the child's home. In many other jurisdictions, the distances covered by severely handicapped children daily may be up to 90 miles each way, and they may ride the bus for several hours every school day. Maine has tried to curtail the busing of handicapped children by using third-party contracts to alleviate the effects of manpower shortages. People on these contracts travel "all over hell" and the state pays as much for their travel time as for their services with children.

In addition to the 21 jurisdictions listed earlier, a number of others report some degree of busing of handicapped students. In these others, however, busing is limited to a small number of districts and children, and staff members are moved more widely than children.

A variation of the rural cooperative model is occurring in several jurisdictions, in that the cooperative agreements are between rural and urban districts. Under these arrangements, rural handicapped students are "tuitioned in" to urban districts, which are reimbursed via the rural districts' excess costs funds for the

education of the handicapped. This pattern is established in Kansas, Louisiana, North Dakota, Tennessee, Vermont (where it is particularly used for educating emotionally disturbed pupils and for providing special needs vocational education), and Ohio.

As an illustration, rural districts in central Ohio are unique in their access to eight major cities, but they cannot recruit enough teachers for children with low-incidence handicaps and orthopedic handicaps. Therefore, rural schools bus these handicapped children into urban areas for instruction. Half of the handicapped students in rural central Ohio are being served in the major cities. Half of the handicapped school population of Columbus comes from outside Columbus, and similar situations prevail in Toledo, Cincinnati, Akron, Cleveland, and Youngstown. To counteract this service delivery pattern, Ohio's Special Education Resource Center Network set up funds three years ago to retrain personnel to meet rural needs for educating students with low-incidence handicaps.

Foster Homes and Other Placements

Louisiana, New Hampshire, New Mexico, North Dakota, Tennessee, Montana, and Wisconsin report that manpower and staffing problems in rural districts necessitate the placement of some handicapped students in foster homes (or in boarding homes, as they are termed in North Dakota and Wisconsin). In New Hampshire, another factor in foster home placement is reported to be the deinstitutionalization of handicapped children and youth to families who are unable to go on caring for them in the home.

Although progress has been made in bringing handicapped children out of state institutions, many jurisdictions continue to institutionalize certain handicapped children. It is also reported that personnel in many institutions are poorly trained for the work they do, and that some personnel in intermediate care facility group homes are not certifiable. A further concern of several respondents is that personnel who staff many institutional and residential facilities focus on the habilitation of clients, at the expense of their education.

As a consequence of budgetary constraints, officials in one state expect increased pressure for a return to residential placement of certain handicapped children, even though the state's consent decree calls for reducing the number of retarded children in institutions. In another jurisdiction, there is pressure to increase the number of emotionally disturbed pupils who are placed in out-of-state facilities.

Programs for Handicapped Children and Youth

In North Dakota, "we have not yet identified the true special education population. There are a number of underserved children. The child count grows as more services become available." In another state, during the 1981-82 school year, 45 rural district programs for the education of the handicapped were not implemented because no personnel could be found to conduct them. In these and rural areas in a majority of jurisdictions covered by this survey, manpower supply and demand are influenced not only by personnel availability, but also by social, geographical, cultural, and political factors that impinge upon recruitment, effective deployment, and retention of personnel. Many jurisdictions describe the impossibility of establishing classroom programs and other services without adequate numbers of teachers.

Many variations are attempted in the effort to keep children in school, but there is acknowledgment that these children are often underserved. For example, rather than provide no service (where personnel are in short supply), or in attempts to stretch dollars and manpower, districts sometimes place pupils with different varieties of mild, moderate, and severe handicaps together in multicategorical groups or inter-related classes. "This does not work because teacher skills are not precise enough, and you cannot train a person to do it all. This delivery mode is abused at the local level (and local superintendents and school boards fight for it) because it is not reserved for the mildly handicapped, and so it is a way to provide service to anyone and call the whole thing a teaching unit." Administrative decisions like this obviously mask true needs for personnel and make it difficult to solve manpower problems that are thus obscured. Further, if attrition among personnel is excessive, this use or abuse of personnel and children must surely contribute to staff turnover.

Another report points out that the resource room is the model of choice for handicapped students because the total costs of resource room instruction come from the state, whereas, in self-contained programs, the local district would be obliged to pay part of the costs for each handicapped student. Keeping seats warm in the regular education classroom saves money, and, as education budgets continue to suffer, the fiscal rationale may become more prominent in placement and programming decisions.

Clearly, systems problems impinge upon the adequacy of programs for children and upon the picture of manpower supply and demand that emerges in a given school district or larger jurisdiction.

"The whole issue of least restrictive environment is of concern, particularly with regard to severely handicapped students. We are concerned about whether or not people have the skills to deal with multiple problems in children. This is not simply a problem of teacher skills but of the system itself."

Pupils With Low-Incidence Handicaps

For the purposes of this report, low-incidence handicaps include severe and profound retardation, severe emotional disturbance/autism, multiple handicaps (including deaf-blind and rubella children), and severe physical and sensory disorders. Success in comprehensive education for these pupils in the public schools has been demonstrated by a relatively modest number of school districts, where public school programming for children with low-incidence handicaps has been the result of professional and community commitment of energies and resources. Students have attained curricular goals and objectives, and education has been accomplished with greater cost-effectiveness than could have been accrued through institutional placement.

Such comprehensive programs for children with low-incidence handicaps, however, stand out as exceptions, rather than the rule. The lack of qualified personnel who could create and conduct these programs is reported to be a paramount factor.

Among the preservice preparation programs not operating within jurisdictions reported in this survey, the major missing links are in visual handicaps, hearing handicaps, occupational therapy, multiple handicaps, severe emotional disturbance/autism, severe retardation, and orientation and mobility specialties, in that order. Among the most major areas of personnel shortage indicated by this survey, 29 jurisdictions report shortages of personnel in severe retardation, 28 report shortages in severe emotional disturbance/autism, and 25 report shortages in multiple handicaps. Where shortages for personnel for low-incidence handicaps were not reported as serious, information in Chapter 3 showed that, in some cases, personnel are not in demand because public school programming is quite limited.

Among the 54 jurisdictions, only Pennsylvania reports near completion in bringing individuals with low-incidence handicaps out of state institutions and identifying and including them in public school services. Pennsylvania, of course, had a head start as a result of the litigation brought by the Pennsylvania Association for Retarded Citizens in 1972, several years before the

passage of Public Law 94-142. In the years between, an intensive deinstitutionalization effort has occurred, and Pennsylvania now reports innovative staffing patterns which employ greater numbers of paraprofessionals and smaller numbers of professionals.

Otherwise, varying numbers of children and youth who have low-incidence handicaps remain in state institutions. Some areas are accomplishing more in this regard than others. Alabama, for example, has deinstitutionalized most of its severely retarded children. New York has moved most of its low-incidence handicapped students out of state hospitals. In Arkansas, the decision in the Springdale case has moved children from the State School for the Deaf in Little Rock to public school placement, and other deinstitutionalization procedures are in progress. The Superintendent of Schools in Delaware has recently issued a statewide directive calling for expansion of public school services for autistic and deaf-blind children. In North Dakota, a deinstitutionalization order has created new shortages of personnel for the education of the severely retarded, and West Virginia reports a program of planned deinstitutionalization which includes interagency cooperation with the Department of Corrections and the assumption of responsibility for adjudicated youth by the State Department of Education. In Montana and Ohio also, most severely retarded children and youth have left the institutions.

In efforts to provide for identified and eligible children and youth with low-incidence handicaps, districts in every jurisdiction make widespread use of placements in group homes, day training centers, day care centers, private and public mental health programs, day centers for the deaf-blind, and district or county residential centers operated or funded by such organizations and agencies as the Association for Retarded Citizens, United Cerebral Palsy, Developmental Disabilities Offices, Departments of Social Services, Divisions of Mental Health, Departments of Health and Human Resources, and local education agencies. Considerable inter-agency cooperation appears to have been effected in this regard.

In addition, some children are sent to out-of-state placements or are placed in foster homes or boarding homes in their own states in order that they may have access to an education. Others are transported daily over considerable distances to have this access.

In Nevada, New Mexico, Oregon, Utah, Indiana, Nebraska, Tennessee, and North Dakota, to name a few, many rural districts can provide few public school services or only limited services

for children with low-incidence handicaps. Officials in North Dakota reflect the position of many jurisdictions: "We would establish programs for these children if personnel could be found."

Other jurisdictions reflect similar contexts and conditions. In Puerto Rico, the current emphasis of special education is toward the mildly and moderately handicapped. In Tennessee, some deaf-blind and autistic and other severely handicapped pupils have been identified and are being served in Memphis and Nashville, but few other public school programs for them have been mounted. Many rural districts in Texas cannot find the personnel to start or maintain programs. Kentucky reports that large numbers of low-incidence handicapped children are educated almost exclusively by means of the homebound program, and access to related services is reported to be diminishing. Hawaii reports that a great deal more needs to be done for children and youth who are visually impaired and hearing impaired, not only in the state itself but also throughout the Pacific Basin. Public school services for severely, multiply, and sensorially handicapped pupils in Arkansas are concentrated in Little Rock. And placement in out-of-state residential settings is one option for children with low-incidence handicaps in virtually every jurisdiction.

Solutions are indeed being sought in many quarters. Alaska Resouroes for the Moderately and Severely Impaired is the state's largest and most recent effort to provide an education to low-incidence children scattered throughout its remote bush villages. Cooperative and consortium arrangements are endeavoring to develop and provide services for blind, deaf, severely retarded, and autistic children in Alabama, Arizona, Georgia, Kansas, Louisiana, Maine, Montana, New Hampshire, New Mexico, North Dakota, Ohio, Iowa, Oregon, South Carolina, South Dakota, Vermont, and Wisconsin. These efforts are often impeded, however, by difficulties in staffing.

Louisiana operates School District #1 as an administrative unit that includes a school for the deaf, a school for the blind, and similar residential and alternative facilities for children with low-incidence handicaps. In Florida, shortages of manpower in these specialties have prompted the state education agency to award special project grants to districts and universities for the development of models for low-incidence education and personnel training that can be disseminated across districts to stimulate teacher training and program development. In Maryland, where deinstitutionalization is in its early stages, several institutions of higher education are providing graduate level

certification training for teachers of the severely handicapped. Meanwhile, budgets for Minnesota's residential homes are being deeply cut, and the state education agency must rapidly take over the provision of services to many children previously housed in these facilities.

The education of children with low-incidence handicaps is perhaps the greatest legacy of Public Law 94-142, because it particularly liberated these children and youth to receive a free, appropriate public education. Their introduction into public education is a change that requires many bridges and transitions—a change that could not be expected to have been fully integrated in the seven years that have elapsed since the passage of the law. What has apparently occurred is that resources, personnel, and other significant conditions have merged in a few schools or communities to create exemplary programs that should serve as models for others to multiply, if human and fiscal resources and other necessary conditions can coalesce. Meanwhile, as the preceding overview indicates, the range and quality of services, and the numbers of eligible children enrolled in public school programs, vary dramatically from jurisdiction to jurisdiction, and from metropolitan center to rural region. To the extent that a few schools or districts have full services or model programs for these children, while others have few or inadequate services, and many have none, the distribution of educational opportunity to these children is not equitable. On the one hand, it would be a naive implementation strategy to assume that all states can do the same when they are not the same. On the other hand, it seems not wrong to anticipate that higher levels of service should become more widely available to children with low-incidence handicaps than is currently the case.

Given the straitened economic circumstances that prevail in the majority of jurisdictions, the question of expansion of services where none or few exist is moot, and the prospects are contradictory. From the east coast come reports of increasing residential placements by certain school districts in an effort to deal with reductions in allocations for public education. From the west coast comes the news that California is witnessing a move to direct special education funds and efforts more exclusively toward the severely handicapped population and to focus on regular education for the more mildly handicapped.

Pupils with Mild to Moderate Handicaps

Responses from participants suggest an extensive trend toward moving children with mild and moderate handicaps into

less and less restrictive environments. This trend has been more or less formalized in a number of jurisdictions. For example, Alabama, Arkansas, Georgia, Indiana, Iowa, Kentucky, Oklahoma, and Vermont report the movement of more and more of these pupils from self-contained classroom instruction to resource room settings (or "learning labs" in Oklahoma). Alabama, Arkansas, Kentucky, Minnesota, New Mexico, Oklahoma, Oregon, Pennsylvania, Tennessee, Vermont, and Wyoming report accelerated placement of mildly handicapped pupils in regular education with an IEP. (In Pennsylvania and Tennessee, this change is particular to handicapped pupils in the secondary schools.) Several jurisdictions contemplate more stringent definitions of mild and moderate handicaps, an action that, if taken, will apparently remove numbers of children with learning difficulties or other mild problems from special education services and situate them in regular education—without an IEP.

In still other jurisdictions, the movement of children toward the regular classroom, though less formalized, is also occurring. Many respondents expressed concern about this movement of children into less restrictive environments for economic and administrative reasons, in the face of shortages of personnel and fiscal problems, rather than for reasons of educational philosophy. There is also pervasive questioning of the readiness of regular educators to take on this responsibility. The considerable additional concern regarding inappropriate organization of multicategorical groupings was reported earlier, and some of the comments at the end of this chapter regarding provisional certification also touch on these issues.

In northern Illinois, philosophical considerations are prompting urban districts toward noncategorical programming on a mild-to-severe spectrum, a change that suggests more resource room and regular class programming and less self-contained instruction for mildly and moderately handicapped pupils. The impetus in California to focus on the regular education program also implies the movement of mildly handicapped children into regular education.

In BIA schools, where some teaching positions in special education remain open well into the school year, many mildly and moderately handicapped pupils are left in the regular classroom. Other jurisdictions also report that learning disabled and emotionally disturbed or behaviorally disordered pupils are mainstreamed into regular classrooms where the teacher may not have received preparation to instruct them.

The spokesperson from North Carolina projected gradual increases in the public school enrollment until late in the 1980's, with an accompanying drop in state-allotted teachers. Accordingly, "this implies for North Carolina an increased effort in local districts to move responsibilities for educating handicapped children to regular education. The trend is to take regular educators and shift them to special education on a provisional certificate. While there are some very good educators for this transition, the role of inservice becomes of tremendous importance, particularly in rural areas."

Taking another viewpoint entirely, Guam and Maine describe a move in the opposite direction: toward more self-contained classroom instruction and less resource room and regular class placement for mildly and moderately handicapped pupils. In Guam, "the resource teacher can't deal with both mild and moderate handicaps at the same time. Although there is no increase in the number of children per teacher, there is evidence that too many kids are moving in and out of resource rooms too rapidly."

In Maine, "the state law passed in 1973 emphasizes resource rooms, and the regulations provide for it, but it is a difficult position to train categorical people and then place them in a noncategorical resource room. We expect to move back to a more self-contained program with capable people. A move to more self-contained instruction will not be easy because of costs, which are always an issue when it comes to self-contained classes. And there will probably be some conflict with advocacy groups that push for the least restrictive environment."

Secondary special education. Public Law 94-142 created expectations for the education of the handicapped that cannot be fulfilled unless the educational experiences of mildly and moderately handicapped pupils terminate in keys to the future. For most of its history, special education has focused on the elementary grades, but, according to respondents in this study, the matter of secondary education for the handicapped has begun to receive substantial attention in the past three to five years. Recent actions in some states to institute minimum competency standards for completion of high school have further intensified pressure to provide a decent education to high school students who have handicaps.

Among jurisdictions reported in this study, 29 listed shortages of personnel for secondary special education, 48 described serious concerns about the quantity and quality of secondary education programs for the handicapped, and most of these reported

secondary programming to be the weakest link in the continuum of services for mildly and moderately handicapped pupils. The comments of one respondent fairly well typify the position of many others: "Certification is K-12. The weakest programs are at the secondary level. We are trying to correct these weaknesses as our biggest focus for next year. We see kids in secondary because they're there, not because we can give them well planned instruction."

The only jurisdictions not reporting concern about secondary programming are California, Connecticut, the District of Columbia, Hawaii, Michigan, and West Virginia. Where secondary programming for the handicapped is flawed, the inadequacies occur across both urban and rural districts, and the consensus is that the shortage of qualified personnel is the single most frequent impediment to expansion and improvement.

State practices in certifying personnel for service in kindergarten through grade 12, as well as generic certification practices, are seen as contributing causes for problems of quantity and quality in secondary special education. These certification patterns do not encourage secondary specialization in preservice preparation. Further, because higher education training programs are prone to emphasize theory and practice at the elementary level, the graduating teacher is often well prepared at only one level but certified at all levels. Several respondents added that higher education faculties have often received their training and experience exclusively in terms of special education for younger children and are themselves ill equipped to provide secondary training and experiences to prospective teachers. All of this has tended to limit the number of instructional and other personnel who can handle handicapped adolescents and make appropriate curricular adjustments.

In many of the 48 jurisdictions in which secondary special education constitutes a problem, development of programs has been slow. In at least two jurisdictions, this lack of continuity is thought to lead many handicapped adolescents to drop out or be counseled out of school. These things are particularly relevant in those jurisdictions in which the whole of secondary education leaves something to be desired. Where programming is available, the inadequate or inappropriate preparation of many personnel is reported to dilute the effectiveness of instruction and to guarantee little more than watered down and remedial training. The concern of one respondent was "a strong feeling that a lot of learning disabled kids are in functional classrooms where the curriculum consists of basic survival skills, and this is closing

doors on some students. These classes are laden with people who think concretely. If the student has good abilities, he is not being challenged and not learning what he could." Meanwhile, there also continue to be broader questions as to what constitutes appropriate secondary education for various groups of handicapped students.

Solutions to manpower shortages at the secondary level do not appear to be forthcoming to any appreciable extent. Twenty-nine jurisdictions report major needs for secondary teachers of the handicapped, and sixteen report such needs for vocational special needs personnel. In few instances does higher education specialize in the preparation of special educators for the junior high, middle school, and high school curriculum. Further, in jurisdictions that do not report serious shortages of secondary personnel, a large number of positions appear to be filled by people with K-12 or similar certification, whose credentials make it appear that they are qualified for these positions but who in fact have had only minimal preparation for what awaits them in handicapped adolescent education.

Many states and districts are endeavoring to shore up these weaknesses through inservice training or retraining of personnel (as will be shown in Chapter 5). Some certification adjustments have also been proposed to make it easier for subject teachers to become certified in education for the handicapped, and to enable vocational educators to become vocational special needs educators via additional coursework. Some jurisdictions are also trying to encourage special educators to undertake retraining in secondary subjects in order to be re-endorsed to fill vacant positions. Meanwhile, adolescents with mild to moderate handicaps might be said to be underserved by special education in the majority of communities where these concerns are reported.

Defining mild and moderate handicaps. The survey undertaken to gather information for this report did not elicit specific information on the labels and classifications used for children in the various jurisdictions. Still, some serendipitous information did emerge in this regard and is offered here as suggestive of definitional complexities as they may occur in some jurisdictions.

In the words of one spokesperson, "categorical labeling of children is a catch-22 situation. Districts need money from the feds and the state. To get money, they have to label children according to defined conditions, and often they carry it one step further and organize instruction that way, too. In reality, it would be less expensive not to assign these labels to children."

The limited information at hand would suggest that the learning disabilities category may in some jurisdictions be absorbing mild speech handicaps and many of the mildly mentally handicapped categories. In other jurisdictions, the speech category itself may be subsuming candidates whose handicaps are other than speech impairment. At the preschool level in particular, it is perhaps "easier to tell mom that the child is speech impaired," and change the label to "learning disability" in kindergarten or first grade.

In any event, if the handicaps of larger numbers of children are being defined as learning disabilities or speech impairments, this may be happening because these labels are politically and socially more desirable than others. To the extent that schools are shying away from definitions of emotional disturbance and mental retardation, these labels are less tolerable to parents, and possibly less tolerable to educators, as well, given the history of litigation attached to these terms. Strenuous activity on the part of learning disabilities advocacy groups is also said to influence the numbers so classified for instructional purposes.

Several respondents discussed the label "slow learner" or "learning problem." In one case, building principals object to the term because it does not distinguish between this classification in special education and other slow learners who continue in regular education. In another instance, the state legislature recently eliminated the "learning problems" definition from special education; as a result, many of the children once labeled for help are now dropping out of school. Another spokesperson described slow learners who had achieved well in special education but who exhibited high failure rates when returned to the regular classroom. Another suggested that education is blaming children for a failure of the system, inasmuch as we may be defining children as learning disabled or slow learners when the curriculum may be the real problem.

"What we are apparently doing or attempting to do is use Public Law 94-142 to say: these are handicapped, and these are not, but those that are not may need alternative regular education services. A parallel is that of bilingual education, where 40 percent of students might otherwise be classified as slow learners. Where do you draw the line in calling people handicapped? The overall issue in the quality of education is that regular education ought to adjust to individual differences."

Personnel Qualifications

Problems in manpower supply and demand not only influence programming for and placement of handicapped pupils, but also

influence the standards that may be used to qualify people to teach them. When supplies of any resource are plentiful, the tendency is to sort and select the superior. When supplies are scant, one settles for less. In special education, the most widespread overall solution to problems of personnel shortage is the issuance of certificates to persons who do not demonstrate the preparation, experience, qualifications, test scores, or other criteria ordinarily used in certification. These authorizations are variously called provisional certificates, permit certificates, out-of-field permits, emergency certificates, waivers, and similar names. They are intended to enable their recipients to perform an educational service for a specified time, during which they must ordinarily engage in training or otherwise fulfill the criteria that are missing or insufficiently present at the time the certification was issued. There are, as well, variations on this theme, such as hiring a series of substitute teachers to fill a vacant position.

A great deal of information has been gathered in this study that reveals insights about the practice of provisional certification in special education in 1982. Comments were gained from all but two of the 54 jurisdictions included in the survey, and so the results portray at least some glimmering of a national picture, both positive and negative.

The content of these responses is so various and so divergent and qualitative as to defy topical organization for display and, after several attempts at organization for topical discussion, the authors recognized that harnessing this information in this way would make its implications less perceptible. Therefore, the comments are presented in their original form as bullet statements and in no particular order. They include not only references to provisional certification and its variations, but also descriptions of state certification practices that shed light on how they may be applied to addressing problems of personnel supply and demand.

The Comments on Provisional Certification

- The state has a policy where a person with 12 hours of special education training (accrued by the end of December or the end of May) can teach special education on a provisional certificate. Therefore, manpower needs numbers don't really tell the true case because many positions are filled inadequately. The state is now using inservice funds in an effort to get people to come back and get completely certified rather than continue to teach on a provisional certificate. With tighter budgets, people

are not going back for the courses and labs they should have. Thus, they are not fully trained and are also supervised by inadequately prepared supervisors. Salaries don't generally go up, and so they are having to give full salaries to people with provisional certification because it is hard to get anyone.

- We have a comprehensive certificate that looks like categorical certification. The state-noted specialization does not restrict the areas in which a certificate holder can work. It simply specifies the area of specialization for which the holder is trained. Although the certificate looks like a categorical certification, it is in fact a comprehensive certificate.
- Letters are submitted to request temporary endorsements. Twenty-five percent of personnel are on temporary certification. We do not permit temporary certification beyond one year unless another request is submitted to extend it. Personnel on provisional certificates get courses in the summer and occasional in-service.
- We have categorical certification. We have worked on the certification issue, and requirements became very stringent three years ago. The state board extended the deadline for new certification requirements until September 1983. Now 99 percent of our teachers have a master's degree and we have very few BA or BS teachers in any area of special education. We have tried to work cooperatively with the universities, and the universities have recognized the shortages of personnel. The schools are also better at identifying children now. We took early childhood, learning disabilities, and visual impairment as three critical areas and worked with universities on tuition assistance for teachers to return to be recertified.
- We are finding that people in communications handicaps can't work with the deaf, for example. There is no real vehicle to determine that there is a specific area or areas where they can work. In the cutbacks, a district could tell a speech therapist to teach the deaf. Communication handicapped credentials cover speech/hearing, deafness, language, and hard of hearing, and people are not equally prepared in all of these but may teach them anyway.
- The greatest need is in the rural areas. Some people are teaching multiply and severely handicapped populations without the training.
- Administrators say that the universities are not training people in severe handicaps. The universities contradict this by saying they have severe tracks; nearly all of them say they do. Certification requirements do not delineate mild, moderate,

severe, or elementary or secondary. A person can be certified, for example, in Emotionally Handicapped, K-12, mild to severe. So the teacher trainers are just trying to respond to certification regulations.

- We still have categories of certification, but a teacher of the educable mentally retarded is also permitted to teach learning disabilities and emotional disturbance.
- There is lots of provisional certification. At least one-third of the special education teachers in the state are minimally certified. Ten quarter hours in special education are required to continue teaching the next year. Requirements for full certification vary according to the major. In some program areas, it is 15 hours; in others, it is 25 or 30. But the provisionally certified people do get the training. Inservice is aimed directly at the manpower shortage. We have got to provide people the 10 quarter hours to get into the classrooms and then help those in the classrooms to fulfill their roles. We have a state-funded grant with money for teachers to train in critical areas. We refer people to that until the money runs out. The trainees must either repay the money or serve it out in a special education position.
- There is no backup of unserved kids here because, although the teachers might not be trained, they are teaching them.
- Positions open are filled with noncertified teachers. As we identify more kids, the pressure is on the schools to provide more teachers. There are occasions where the loads are exceeded and there are questions on how many additional students justify an additional teacher. Justification of new teachers is open, flexible, and negotiable.
- The mental retardation certificate covers the full continuum to severely/profoundly handicapped, but few of these people have the skills to teach the severely and profoundly handicapped.
- If no certified people can be found, the schools use noncertified limited-term people who will hopefully become certified in special education and who are hopefully already certified in elementary or secondary education. They do have a few teachers without any certification. People on limited term certification are required to obtain minimum requirements in a limited term, e.g., 20 semester hours of college.
- We need to do a lot more in paraprofessional training. Only one community college offers a certificate Associate in Arts program. Having gone through the program doesn't guarantee employment, because these people can be hired without going through the training since the only requirement is a high school diploma. We are trying to increase the probability of being hired as a result of going through the program.

• People are certified for special education and have an area of focus, such as generic mental retardation/learning disabilities, hearing impairment, and so forth. Because of the special education certification, they could teach in other specialties, but we would not hire them for other areas unless we could not find adequate personnel.

• In some categories, it may be necessary to allow cross-categorical programming, such as resource room or self-contained programs for moderately and severely handicapped students. The teacher might be trained in resource/learning disabilities but end up in a rural area with a mixture. The district can put all the kids together in one classroom (including severely handicapped children) and call it one unit.

• There is a move to decategorize programs, to make them noncategorical. Graduates endorsed in a specific area may be into many handicapped areas in their work.

• The State Commission on Teacher Training and Licensing (Board of Education) determines areas in which to issue certificates on an emergency basis each year. All areas of special education are always on this emergency list. As of 1981-82, special education personnel comprised 79 percent of the total of limited certificates issued in the state. A total of 639 people are on limited certification: 400 in learning disabilities (probably in multi-categorical resource rooms with a certificate only in mental retardation); 63 in emotionally handicapped; and 143 in mental retardation. Looking at preservice figures, there should be enough personnel. But either they are leaving, or many of those enrolled already have jobs and are enrolled in school also. All bachelor's people working in the state have to have the master's degree within the next five years, so this indicates that many students in higher education are also teaching at the same time. This is the flaw in the data.

• There is a lack of people for multidisability resource rooms. They must be certified in at least two handicapped areas, but can then serve any condition. There are more of these programs now and not enough teachers, particularly in rural areas. Temporary certificates are being issued to meet this need. Learning disabilities personnel are also lacking in rural areas, and there is a high attrition rate. This is our second greatest need, especially at the secondary level. We are issuing temporary certificates there, too.

• There is a lot of busing. They try not to take the kids too far, but they do. They use provisional certification, and the itinerant and consulting teacher models stretch personnel further. We are almost at the point of abuse in letting paraprofessionals run classrooms just to stretch services.

• For special education people, there is a plan of professional development (and this is not a provisional certification). It outlines all courses needed to be certified and must be attached to the plan sheet of the annual report. If teachers are not certified or on the plan, the school is denied approval. If a person has a plan of professional development, he is considered fully certified and the school is approved. A person can get temporary certification if he has a bachelor's degree but no courses in special education. Then he needs to take six hours per year to renew it.

• Many diagnosticians have lifetime certificates and were trained when those kids weren't even in school. This is also true of secondary personnel.

• Programming is often cross-categorical. With certification in learning disabilities and a couple of courses, then by program standards one can teach even severely emotionally disturbed kids. This is allowed because of problems in getting teachers, particularly in rural areas. Certification is K-12. You don't specialize in ages or categories until you do graduate work. A person could do a bachelor's in psychology and a master's in special education or secondary education, and then end up in a regular elementary classroom. Certification allows for K-12 generalists, and hiring practices allow for different placements of teachers.

• Districts use the homebound route as an alternative to setting up services or expanding programs for the severely and multiply handicapped. A lot of kids should be in school but are popped into homebound, instead, and there are overloads of kids on one teacher. In many cases, the homebound teachers don't have specialized training. Districts keep getting money by providing one or two hours per week by personnel uncertified in special education. One district has more homebound teachers teaching the handicapped than certified teachers teaching special education classes.

• There is no real over-supply of personnel. This is because, where personnel do need exceptional child education endorsement, they don't need to be endorsed for specific handicaps. For example, a person does not need to be endorsed for hearing impairment in order to teach the hearing impaired. This muddies the issue.

• There is a lack of certified special education personnel in rural areas and a drop in enrollment. A good number of provisionally certified people are delivering special education. There is a system to push them to get certified, but it is not enforced.

• Certification is automatically provisional until teachers have had a year of experience. Also, when a district begins a program, it may subsequently have to certify personnel in this way. There is a review committee. At the end of the year, teachers have to show progress in gaining credits, or completion of their certification is dropped altogether.

• The state is changing the certification policies all the time and trying to move things around, and the fiscal question is prominent. The effort is to maximize the numbers they have to spread around

• When we designed the interim regulations, the Board of Education said not to adversely affect the people out there. But you have got to protect the kids. We established a basic requirement to certify in a second area. The teachers thought the practicum was a farce if they were already teaching. So you don't have to take a practicum if you are certified in at least one area—special education plus three years' experience. If completing categorical certification, however, a practicum is required. Practically nobody opts for the practicum. They prefer to take three courses, rather than two, one of which is a practicum.

• Severe handicap is not a shortage area but is surrounded by many problems. The old trainable mentally retarded certification is carrying many people here. The severe certification in a new package is before the state board, and the issue is whether people are to be managers of services or providers of services.

• We have shortages and the universities are not turning out enough certified people. We depend on out-of-state recruitment and have to fight with certification differences. We have three or four major universities but they are not turning out that many. Many people are on provisional certification. These fill the university classes: retreads and recertifications.

• We are getting requests for extensions of variance and are having to force provisionally certified people to complete training.

• Inadequate numbers of new trainees are available for preschool handicapped. This is the greatest overall shortage area. The state mandates services for ages 3 to 5 by 1985. We only have 18 special education units in the state with a preschool handicapped program. There is the option of temporary credentialing for three years. This is being used by a lot of people.

• We need all teachers desperately. Last year over 800 persons who did not have education credentials at all received certification because there was no certified person to take the jobs. This is not only in special education but in all areas.

• We have conditional certification which means a degree plus six hours plus an agreement by the person to continue to complete special education requirements. This conditional certification continues to be used frequently.

• There is no specific certification for special education in vocational education. It is the responsibility of the local district to ensure the proper background. The University has started an 18-hour program on basics of vocational education. This is not a state credential but is for the resume, so that districts can fulfill the responsibility of attaining people with the proper background. This certification-and-credential thrust is a departure from the thinking that only a higher education program leads to credentials. It is very needs responsive and could also apply to bilingual and multicategorical credentials.

• Districts are realigning staff and shifting assignments. . . . Curriculum resource consultants function as coordinators of training. Now some are being asked to teach in the classroom and eliminate this function. Many trainers are being asked to take up other duties. . . . Districts are pushing regular educators into special education slots. There is an open market for the universities in retraining.

• We check certified teachers in special education classrooms. If a teacher is not certified to teach what he teaches, then the local district cannot be reimbursed. We issue provisional certificates. Last year we offered ten in special education. The provisionally certified person must go to a college and enroll in an approved program. The program must verify this enrollment, and then the district can be reimbursed.

• There are both urban and rural shortages. Lots of people are on variances and provisional certificates. The state granted 300 variances to student:teacher ratios last year.

• Two new certification areas were added in 1981: one for educationally handicapped (educable mentally retarded, trainable mentally retarded, and severely/profoundly retarded), and the other for educable mentally retarded/specific learning disabilities. The universities were well prepared in advance of this change, and apparent oversupplies of graduates for 1982-83 in EMR/SLD and apparent undersupplies in educationally handicapped will be easily adjusted by assigning new personnel according to their now more flexible credentials. EMR/SLD personnel are also certified to teach learning disabilities and fill the emerging needs in this area. They can also become certified in the educationally handicapped area with some additional coursework.

• We are providing for-credit coursework with whatever discretionary money we do have in the state in order to retrain people in shortage areas.

• Each district has a district educational office with a team leader and five people, including a special populations coordinator to give technical assistance and training to districts. Half of these coordinators are not trained in special education. We have got to train these people.

• There is not a lot of provisional certification. The higher you go, the more likely it is. Consulting teachers might be provisional, and also coordinators and speech people. But not a lot.

• Certification is noncategorical for resource rooms or self-contained classrooms. Teachers must have either the elementary or secondary certification with additional endorsement in special education. In the last few years the certification has become K-12. It is up to the local district to ensure specific background qualifications, such as learning disabilities, mental retardation, and so on.

• There is no certification in bilingual special education, but we have quite large populations of Portuguese, Hispanic, Vietnamese, and Cambodians. There are not many personnel available, and we are using many paraprofessionals at this point.

• Under the new law, teachers must earn six credits every six years. But school boards have the option of substituting six professional growth points. We will begin to look at the boards' professional growth point policies next year.

• We are doing a lot of inservice to prepare people in visual handicaps and emotional disturbance. This is sponsored by the service centers with training by higher education. Districts send teachers to the training. Large numbers are on emergency certificates and are teaching in these areas with hardly any special education training.

• Certification in some areas allows you to teach others than whom you are certified for. You can teach in a resource room of emotionally disturbed, mentally retarded, and learning disabled if you are certified in just one of those areas. We are moving toward a generic resource teacher certificate. Multicategorical grouping is primarily done in rural areas. The cities separate children more.

• The recertification requirements: districts have to have a five-year master plan and a staff development committee. Every employee completes 50 clock hours every three years to be recertified. Criteria for approved activities are established at the local level.

• In the spring of 1981, the state ran about 100 short in its personnel needs and has usually run about 100 short per year. To compensate for this annual shortage, the state issues letters of authorization, which is a temporary certification for one year, mostly to regular education teachers to teach handicapped students. The state has, in this manner, authorized about 65 teachers per year for the last three years, and for about ten years in some rural areas. The procedure is that districts advertise and otherwise show efforts to recruit certified teachers for special education. If positions are not filled, the district petitions the state department in August for permission to issue a letter of authorization. Districts come up with names of candidates (usually representing whomever is available; a person may apply for a job teaching music, which is filled, and be asked to fill a special education job instead). Teachers on letters of authorization are supposed to enroll in a training program to become fully certified. Higher education evaluates transcripts and sends the state a letter of deficiency, stating what it would take to get a person certified. Many of these teachers in urban areas actually do enroll for training. In rural areas, people frequently promise to enroll but don't.

• Generic teachers can teach any level, any handicap except sensory. It is a district responsibility to evaluate teachers' experience.

• Nine percent of the special education teachers need to remove provisional certification and get full certification. Also, if a teacher is certified in any area of special education, he can teach in any other area of special education. In this regard, 20 percent or more should become certified in a second area.

• The problem is that it is acceptable officially for a person to have 25 quarter hours of credit and be "qualified" to teach special education. Stronger standards will cut even more jobs. The state is trying to get credits clarified to identify core courses from campus programs so that certification training will not consist of a string of workshops.

• There are provisional certifications in the rural areas. The previous commissioner never kept a count of these and gave waivers and the special education office never saw the data. Now we are getting tighter on provisional certification, and the procedure is now part of the state plan governing numbers not appropriately identified, and part of a plan of action. There can be no more waivers after the fall of 1983.

• We have a categorical endorsement. People have to be endorsed in behavior disorders, learning disabilities, or other specific handicap. For mixed exceptionalities, we have the

generalist endorsement because almost all programs are mixed due to the distance and rural nature. This is a hell of a fix. Generalists are supposed to be masters of all, a combination of all levels. We would be better off on cross-categorical or non-categorical arrangements.

- There are big shortages in rural areas. The universities are in urban areas. Rural districts request exceptions to hire people who are not qualified with 25 quarter credits. The state department will give a non-renewable exception for one year. At the end of the year, the person must have completed 25 quarter credits.
- This state grants out-of-field permits, and many districts use this because they are in a bind to recruit personnel. Regular educators can in this way teach special education if they take six additional hours toward certification per year to keep their out-of-field permit.
- Everyone is certified. There is a severe penalty for violating certification requirements. But, with the present numbers of kids coming in, we are on the edge with the supply of some certified people.
- We are developing certification for directors of special education. Before, no special education training was required of directors. The state education agency is identifying competencies here.
- The kids wait. They are all in school. Child find was effective. But they are not being appropriately served. They use substitutes, whom they can pay for 90 days, and then they have to hire another substitute.
- Many teachers of visually impaired, hearing impaired, and orthopedically handicapped are permit teachers, and it has been this way for a long time. This is how we get many of our vision people. A good many do get certified.
- Certification is generalized and noncategorical. Certification in exceptional children is K-12, with a minimum of 24 hours in special education for any situation. This is what most people have.
- There are three areas of bandaid approach. In early childhood, we have to issue temporary certifications. In learning disabilities and emotional disturbance, when people are not fully certified, the district can go into a tutor-and-training program under the supervision of a certified person. The teacher applies for individual approval year by year, filing with the state his training program and schedule to complete it. These people will not get approval in the fall without a transcript verifying completion of an additional segment of training. This is not like the early

childhood temporary certification; this is institution training, a graduated schedule with salary increases while moving toward completion. It involves reimbursement to districts. This helps the rural areas, but urban areas do it, too. In the past year we began a program for speech/language where undergraduate level people can get a credential in three years, within which they complete coursework necessary for Level 3 speech pathologist (the equivalent of ASHA requirements). To get a temporary credential, the undergraduate degree must be in speech/language.

- Rural areas have severe problems in recruiting speech therapists. So they patch it together with aides. A therapist sets up a program for aides to operate.
- There has been a large increase in provisionally certified people, primarily in multicategorical programs. There is a big desire to educate kids locally. Multicategorical service is prevalent. This is an experimental effort—a special needs delivery system—to group kids by need.
- We do waive certification. If a person has some credits and enters a program, we approve these on an individual basis. The contingency is whether there is another endorsed teacher to supervise. The person must pick up eight hours of training per year to be eligible for a review of the waiver. About one-third of our special education teachers are on temporary certification.
- There are very few waivers on certificates. The law prohibits this except under "no availability." Districts fill in with emergency certificates and then get rid of these people when a qualified person becomes available. We are not using inservice to retrain for certification.
- In learning disabilities, many teachers are on provisional certification. In speech/language, universities are not keeping up with demand. Licensure requires the master's degree. Some are on provisional certificates.
- We are offering a 6-credit course to special educators who lack enough preparation to work in the areas they are working in. They are on provisional certification. This course is provided to 300 teachers.
- It is not easy in this state for a regular educator to bump a special educator. The only occurrence is in our largest city. There, a court order allows them to hire teachers with minimal amounts of special education training when they have trouble recruiting. These people are not adequately prepared (education degree plus nine hours of special education). But this doesn't happen in general.
- The state runs a regular program for permit teachers. The education service agencies work with higher education to bring

training to the permit teachers. The county must also provide additional assistance to permit teachers in terms of clinical supervision.

• There is a severely/profoundly handicapped training program at the master's level. This year the big emphasis is on inservice because many practicing teachers don't have degrees but have been teaching severely handicapped students for many years. This is also true for intermediate care facilities. Many intermediate care people are not certifiable. The facilities are small institutions in which 20 to 25 people live in a group home style. All of them need some skilled nursing. Some get education at the intermediate care facility because health hazards prohibit attendance at school. Others are able to get out to public school programs.

• We have big needs for personnel in emotional disturbance and secondary education for the handicapped. Something is covering up these shortages. If you have a certification or endorsement in special education, you can teach in any area. For example, speech people can teach emotionally disturbed. This covers up the fact that we greatly overproduce learning disabilities people and underproduce in other areas. Districts can use people any way they wish. This allows universities to be lax in responding to critical needs. They need to become increasingly accountable, but there is no handle to make them do it. We take whatever they give.

• We are enlarging our severely handicapped programs. A certified teacher from any category can serve these kids under current regulations.

• Special education traineeship loans of $450 are available. Any teacher can apply and usually gets one. These are for training for a new endorsement, usually a second endorsement. They agree to teach to the new endorsement the following year. The funds for this total $70,000.

• Regular education teachers are retraining for special education. With seniority, then they can avoid the RIF's. If they had student teaching before, then they don't have to have it again to become certified in special education.

• There are two types of emergency certification. One is out-of-field certification (for example, an English teacher who works in special education). These people need to sign a professional commitment to enroll in special education for six semester hours annually. As of November 1982, they had issued 50 of these certificates. Eighteen are in gifted (as we are trying to increase gifted services), thirteen are in mental retardation, twelve are in learning disabilities, and six are in behavior disorders. The other

emergency certification is a permit. This is a higher level. The person has some background in special education. At the end of November, the state had issued 618 of these certificates for the year: 37 in gifted, 333 in learning disabilities, 101 in behavior disorders, and 95 in mental retardation, with the rest of them scattered over several areas. If the person has taught for three years, he can waive the practicum at the university's discretion; this is not automatically done.

- Local special education directors don't need certification in special education, just an administrative certificate. Their skill level suffers sometimes in evaluating services. This is a target of inservice. Fifty percent of the special education directors do not have credentials in special education. In small districts, special education is just an additional thing for the principal to do.
- Out of 65,000 or so handicapped children in the child count, 5000 to 6000 of them are in regular classrooms with an IEP. The regular teachers are definitely not qualified to teach them. The increases in these numbers are getting us very, very involved with regular education inservice. Our Part D application to inservice these regular educators was turned down. The regular educators are supposed to have a backup of special education teachers, but this doesn't always work in too many instances. What we hear is, "We're terrified; they're terrified; the kids are terrified."

Quality Assurance Measures

Although struggling with quality issues, the jurisdictions also report efforts to improve the quality of personnel and of programming for handicapped children. Several respondents emphasized the value of extending preparation of new personnel into a one or two year internship in the schools, and others suggested that much of the practical training necessary for good instruction must occur in inservice training on the job. Recognition of similar needs has led to the establishment of five-year programs for preparing special educators, such as those now operating at the University of Kansas and University of Maryland.

Several states have recently introduced teacher tests as part of graduation requirements in special education, or as part of certification requirements for entry into the profession. In some instances, problems of validity and other issues are still to be worked out, and, if the minimum standards for successful completion can be manipulated up and down in relation to personnel supply and demand, then teacher tests will add little but confusion to

the educational endeavor. Further, in jurisdictions where the tests have been initiated, there is considerable fear and some evidence that they may curtail the numbers who apply to take them, as well as the numbers who pass them and subsequently enter the manpower pool. While these questions pend, it would seem more judicious to have some method of evaluating the competencies and knowledge of personnel than to have none, and the experience to be gained in applications of these trial efforts may lead in the future to increasing effectiveness in the matter of assessing teacher quality. It remains true that other conditions and complexities surrounding the teaching profession also need attention before the overall caliber of new applicants might be expected to improve appreciably, but evaluation of teachers introduces the eventual possibility of recognizing and rewarding demonstrable competence in many members of the education profession.

North Carolina. Part of North Carolina's quality assurance program in special education is the evaluation of all teachers who graduate into the profession. The evaluation instrument is a written examination administered as trainees exit their higher education programs.

South Carolina. The Teacher Certification Professional Development Act requires new teachers to be tested upon completion of their undergraduate training and again after one year of probation in the first year of teaching. A team of peers evaluates each teacher by means of a nationally validated testing instrument. South Carolina began this procedure in 1982.

Louisiana. Five years ago, the State Superintendent of Schools directed that teacher education graduates must pass the National Teachers' Examination in order to become certified to teach. The scores were validated, and very high passing scores were set.

Texas. A Teacher Competency Test is scheduled to be administered to all Texas graduates as a condition of their certification. The first round of the entrance test will occur in the fall of 1984; the entrance examination will then be necessary before prospective trainees are admitted into teacher education in their sophomore or junior years of higher education. The exit examination, which will be required for certification, will not be administered until around 1986.

Georgia's new competency-based certification requirement is comprised of a written test and an on-the-job assessment. Certification is not renewed until a passing score is achieved. Earlier teachers were grandfathered in, but they will need to be retrained to qualify for renewal certificates.

Arizona requires individuals to pass the Arizona Teachers' Proficiency Examination for teacher certification.

Oklahoma puts first-year graduates on probation. They are evaluated three times during this year by a supervisory committee and take an examination at the end of the year.

Florida gives new graduates temporary certification until they have completed one year in a beginning teaching program, during which they are judged by a peer teacher, principal, supervisor, and support team. Each applicant must have already passed a written examination on 23 generic competencies for educators, which include questions for regular educators on educating handicapped children in the least restrictive environment.

West Virginia. As of 1985, graduates entering the profession will have to meet a proficiency level on a statewide criterion-referenced test in their specialty areas. This requirement will apply to principals, psychologists, teachers, and all other personnel in education. By 1985, all personnel will also go through a standardized performance-based assessment. A third component to be assessed will focus on basic skills.

Virginia is working on a plan of provisional certification for new teachers, with the first year of teaching as a beginning teacher support year in which higher education and public schools cooperate to "complete" the new teacher's training. This includes provision of supervision and demonstration of competency in the work place. The National Teachers' Examination is required for a teaching certificate. The second phase of the Virginia Validation Study of the National Teachers' Examination will provide recommendations for a "cut score." Approval by the State Board of Education will determine the score, which is to go into effect in 1986.

Discussion

The findings presented in Chapter 4 reveal that specific personnel shortages and geographic and socioeconomic obstacles to recruitment are adversely affecting programs for handicapped children and youth. To some extent, the problem is circular, in that minimal services for certain children in certain areas discourages the production of greater numbers of personnel, while programs clearly cannot be initiated nor expanded unless adequate numbers of qualified people can be hired. Moreover, fiscal austerity and recruitment difficulties are prompting districts to staff programs and place children by means that obscure very real needs for additional qualified personnel.

One such measure is the apparent increase in the ratio of students to instructional personnel. All but six jurisdictions are vulnerable to the expansion of class loads and case loads, by virtue of their authority to grant exceptions or waivers in response to the often increasing requests of local districts. The majority of jurisdictions cite weaknesses in the rationales that justify the student:teacher ratio proportions currently recommended, and exactly one-third lack any legal or regulatory authority for their statements of class and case loads. Meanwhile, legislatures and administrative units have begun to examine and/or revise student:teacher ratios in the course of overall fiscal adjustments. To the extent that the ratio of students to instructional personnel is increasing, either through the granting of waivers or by regulatory authority, this change would appear to artificially reduce the demand for personnel at the same time that it may genuinely diminish the quality of education. For all of these reasons, a very high priority should be placed on pulling together from research and practice what is known about class and case loads in special education and to specify appropriate conditions for learning and individualization of instruction for children with various types and degrees of handicapping conditions. Otherwise, special education will remain in an extremely precarious position with regard to the numbers of students who may be placed in one instructional unit.

The information reported in this chapter should also make clear that counts of open positions and filled positions do not necessarily reflect the realities of manpower supply and demand. In no way do these numerical tabulations account for such rural dilemmas as justifying one full-time employee to meet fractions of needs in districts separated by hundreds of miles. Although one-third of an FTE may be needed to provide services in each of three remote schools, adding them up to represent the need for one professional obscures the real issue. And the issue is that the demand for personnel is greater than that reported by manpower data systems in many jurisdictions with large expanses of remote territory.

Further obscuration of actual needs for personnel arises from the practice of inappropriately assembling handicapped children in multicategorical groups for instruction by personnel who are acknowledged not to have the preparation nor experience to deal with the diverse learning styles, handicaps, and related needs such groups can present. Many children with diverse handicaps share similar instructional needs and can thrive in multicategorical groups, if their teachers are well prepared to instruct them

and if grouping is based on instructional, rather than administrative, needs. To the extent that abuses of this arrangement are reported in this study, they are not carried out solely for purposes of innovation or improvement of education but, rather, in order to spread insufficient personnel and dollars over a very broad educational and geographical terrain. A similar practice emanates from certification policies that permit a person certified simply in special education, or in a given specialty, to teach many or all degrees and types of handicapped children, without the proper preparation and experience to work with certain of them. At the same time that steps such as these are being taken to deal with problems of recruitment, deployment, and expenditure, budget cuts and subsequent personnel losses are rendering many state departments of education less able to monitor, provide technical assistance and training, and coordinate the Comprehensive System of Personnel Development.

These measures, and the flexibility they imply in personnel assignments and pupil placements, may be administratively useful in filling vacant positions and conserving dollars. When abused, however, they accomplish the opposite because they distort the true demand for qualified personnel and because they most assuredly doom many teachers and pupils to failure in the classroom. This flexibility appears tantamount to what would happen in regular education if first-grade teachers were frequently assigned, instead, to high school mathematics, or if science teachers were assigned groups of students for instruction not only in science, but also in math, English, history, and physical education. Many respondents to this survey reported that an accurate understanding of manpower supply and demand can never be derived as long as specialists whose numbers are abundant can routinely assume roles in specialties that are in short supply but for which their training has not adequately prepared them. Indeed, this deployment practice makes it appear that abundant supplies of certain personnel do not exist, and that corresponding shortages are far less serious than they may be. This confounding on the demand side also confounds the supply side (preservice preparation projections), as it perpetuates the over-production of certain personnel and the underproduction of others.

The results do not go unnoticed, particularly as irregular practices in multicategorical grouping affect resource room programming. Planned program changes in two jurisdictions are based on dissatisfaction with the results of the resource room model and an acknowledgement of any teacher's inability to succeed

with extreme diversity of handicapping conditions and learning needs. Other respondents reported similar misgivings and, in one case, regular educators are reported to be asking for the full responsibility of handicapped students placed in their classrooms because "they are tired of seeing these children being pulled out for special services and because they are not seeing much progress as a result of resource room instruction."

Respondents concerned with these issues noted that the fault is not in the teachers nor in the children, but in the system that permits and perpetuates faulty pupil placement, faulty personnel assignments, and distortions of the manpower picture. In turn, the system is suffering from real personnel shortages, serious situational recruitment problems, and fiscal crises. And, ultimately, teachers take the blame for the perceived poor quality of education, though they are clearly not in control of the educational policies influencing their performance. Through it all, the overlapping complexities make it difficult to establish who is accountable for what.

The widespread assignment of personnel who are less than fully trained, certified, or qualified to teach what and whom they teach represents another variation on the same theme. Admittedly, certification guarantees only that a prospective teacher has taken required courses and received a degree and, for that reason, teacher examinations and other measures are being taken to introduce other requirements before induction into the profession. For the time being, however, certification does tend to point out the specializations for which a person has or has not received preparation. In this regard, there appears to be cause for alarm when up to 25 and 30 percent of special education personnel in some jurisdictions lack full qualifications for the work they are performing. In some jurisdictions, provisional certification is far greater among special education personnel than among any other group of educators, and no jurisdiction is free of the need to certify some special education personnel on this marginal basis.

Even when handicapped students are assigned to teachers with seemingly adequate certification, this does not always mean that such personnel are actually prepared for their instruction. In the financially induced trend to move mildly and moderately handicapped pupils closer to regular education, some are simply placed in the regular class with an IEP and with teachers who have had no experience in providing for their instruction. Although it is true that the regular classroom is the least restrictive placement of many handicapped students, and although excellence of instruction in regular education would

make it possible for many handicapped children to thrive in the normative environment, it is not at all clear that this kind of excelience is uniformly present. More clear are the fiscal exigencies that are thrusting increasing numbers of handicapped children into the mainstream but further from specialized instruction. The reasons for this movement do not appear to be altogether educational nor therapeutic, and the resources to help personnel and systems support this transition are too seldom forthcoming.

The educational short-changing of handicapped adolescents is attributable to the lack of qualified personnel and to the inadequacy of programming for handicapped students in the junior high, middle, and senior high schools of many jurisdictions. The dropout rate of handicapped youth is reportedly high in many locations, not only because secondary educational opportunities are absent or insufficient, but also because students may be counseled to discontinue school and begin work without the skills they need to secure and keep employment. Nearly every jurisdiction surveyed reported current efforts to make up for lost time in the secondary area, where improvement and expansion are hampered by personnel shortages.

For children with more serious handicaps, different variations of quality, quantity, and equity of services exists. Insufficient numbers of personnel are available for the education of children with low-incidence handicaps, and many of those who are currently employed have reportedly been trained on a continuum in mental retardation (or other handicap), with little precise preparation or experience in the more severe levels of the disabilities in question. Further, because programs for these students have not yet been established in many districts, some individuals remain unserved and institutionalized, others are underserved in inappropriate instructional arrangements, and others are placed in foster homes or residential settings away from home or must travel long distances by bus in order to receive an education. Although some jurisdictions can point with pride to their accomplishments in educating these children, the comprehensive public school program for individuals with low-incidence handicaps appears to be the exception, rather than the rule, and the possibility of new program starts diminishes with declining resources and continuing scarcities of teachers, aides, and related services personnel. Therefore, the services that many handicapped children receive, and where they receive them, nave a lot to do with where they happen to live, and less to do with their rights to an education.

Salaries for educational personnel also vary markedly from jurisdiction to jurisdiction, and the salary ranges shown in Chapter 1 suggest that few are offering wages remotely competitive with other potentials in the job market. As pointed out in Chapter 3, attrition of educational personnel is expected to surge when the economic situation brightens and the overall employment situation eases. Increasing turnover rates will put districts at an even greater competitive disadvantage, and will force education to pay even more costs for training and retraining personnel.

Moreover, salaries for special education personnel are no different from those of other educators, though the work they do is often more difficult and stressful and should require longer and more intensive preparation. It should, therefore, come as no surprise that preservice enrollments are declining and that shortages of personnel continue.

Meanwhile, certification and administrative policies make it possible for districts who cannot find teachers at salary levels offered to decrease the demand for personnel by reorganizing programs and pupil groupings and by placing more children in regular education, frequently without the instructional expertise and support necessary to their educational achievement. These same policies also make it possible for districts to increase the supply of personnel by assigning to special education more and more individuals who are not prepared, qualified, nor certified to work with handicapped students. As long as inequitable and minimal teacher salaries, declining district resources, and shortages of fully qualified personnel continue, these practices will also continue. As the pool of available qualified personnel diminishes, these hiring and deployment practices will increase. Thus do depressed budgets for education and scarcities of qualified personnel prevent handicapped children from receiving an appropriate education in the public schools.

In similar moves to curtail expenditures and decrease demands, various legislatures, governments, and other agencies in authority are moving to redefine eligibility of students with certain handicaps for special services. The continuing identification of eligible handicapped students is also hampered as long as full services are not available. In the same manner that acceptable levels of personnel competency may be defined and redefined in relation to manpower supply and demand, so perhaps it has become possible to define and redefine human handicaps in relation to the ebb and flow of human resources. To do the former is to destroy the meaning of competence. To do the latter is to destroy the meaning of equal rights and equity of educational opportunity.

Chapter 5

Inservice and Preservice Programming

This chapter examines the responses of inservice education to issues of quantity, quality, and equity in special education, as well as relationships between inservice and preservice preparation of personnel. The purposes are:

- To set forth needs and priorities that have dictated inservice programming in each jurisdiction;
- To describe inservice delivery in general, with specific attention to several statewide activities;
- To explore conflicts experienced by jurisdictions as issues of manpower quantity and funding interfere with achievement of objectives for improving the quality of instruction; and
- To present a synthesis of participants' comments concerning the quality of preservice preparation of personnel at colleges and universities within their jurisdictions.

The chapter concludes with a discussion of these factors, their relationship with one another, and with educational services for handicapped students.

Inservice Training

Inservice priorities among the jurisdictions are dictated by needs assessment data. All jurisdictions use some form of manpower planning activity to predict needs for training and for personnel. The accuracy of assessment data varies according to the flow of communication among and between higher education, school districts, the state department of education, Comprehensive System of Personnel Development (CSPD) committees, training networks, educational service centers, and other parts of the system. Although communication breakdowns tend to affect the availability of information necessary for long-range estimates of manpower supply and demand, it is generally possible to judge immediate needs for professional development. A representative example of the procedures used for this purpose is that of Georgia, where "we take the results of compliance monitoring visits, all recommendations from the CSPD Committee, recruitment information, and other data, and we create a composite document. We also use information from informal surveys through the Georgia Learning Resource System, higher education, state

recruitment office, and other sources. In this way, we discover the primary needs for inservice training." The information thus derived becomes more and more useful as state education agencies and other administrative units provide training and technical assistance to enable school districts to become responsible for professional development, from needs assessment to service delivery.

The meaning of "inservice training" should be distinguished from the meaning of "preservice training." Preservice preparation in institutions of higher education is intended to prepare trainees for roles in special education through extensive theoretical coursework and practical experience, within the framework of a full college curriculum. Through comprehensive graduate programs, preservice programs also prepare educators to assume new roles and to attain new endorsements or levels of certification. Inservice training, on the other hand, is meant to be on-the-job training to strengthen the skills of practitioners; to help them to develop new skills and knowledge in their specialties as the state of the art develops; and to instruct them in new rules, regulations, and trends affecting their work.

Many jurisdictions, however, report that inservice resources are being diverted to the training of educators to assume new roles and attain new endorsements in areas of personnel shortage, and to provide coursework for provisionally certified people in order that they might eventually become fully certified for the positions they are currently filling. At the same time, some proportion of trainees reportedly scheduled to complete higher education programs in special education are, in fact, the same sorts of people—practicing teachers or other personnel working to achieve a new certification or to remove provisional certification. Thus, it would appear that problems of supply, demand, and deployment are blurring certain distinctions between inservice and preservice.

Some jurisdictions report that vast staff development needs have shifted the emphasis from preservice to inservice preparation of personnel, a move seen as particularly necessary in view of the apprehension that further cuts in state and federal personnel preparation budgets may liquidate some preservice preparation programs. In other jurisdictions, considerable preservice activity is aimed directly at the retraining of existing personnel to fill position vacancies for whom qualified personnel cannot be found, and/or to fully certify those who are filling positions without certification to do so. Much of this retraining is targeted on personnel in rural districts.

Only New York reports that none of its inservice resources are used for certification training or for recertification training of personnel for special education. Most of the other jurisdictions are engaged in retraining and recertification to some degree, either through cooperative arrangements for university coursework or through arrangements for granting higher education credit for inservice training conducted by other instructors apart from the campus. Some are providing inservice to help regular educators meet new state certification mandates that require all regular teachers and supervisors to have at least a course that addresses such competencies as: identification of learning problems; understanding of handicapping conditions; implementation of individualized instruction; federal and state regulations for educating the handicapped in the least restrictive environment. Further, in some states where heavy teacher layoffs have occurred, "many regular teachers have tenure, while special educators are being pink-slipped. Districts are pushing regular educators into special education slots, and there is an open market for retraining at the universities." In states where teacher tests and other new certification standards have been initiated, many special educators were grandfathered in, but will require retraining to qualify for renewal of their certificates.

A number of states report the use of inservice training to move provisionally certified personnel to full certification for the special education posts they hold. Another effect of recruitment problems is the report by 22 jurisdictions (shown below) that inservice funds, tuition assistance, and other means are used to retrain and recertify practitioners (who are certified in other specialty areas) to fill positions in critical shortage areas of special education.

Alabama	New Mexico
Arkansas	North Carolina
Delaware	North Dakota
Georgia	Ohio
Hawaii	Oklahoma
Illinois	South Dakota
Indiana	Utah
Kentucky	Virginia
Louisiana	West Virginia
Missouri	Puerto Rico
Montana	Bureau of Indian Affairs

Responses related to inservice priorities are displayed on Tables 7 and 8 which, together, show the major activities of each jurisdiction and the composite of all jurisdictions. Needs and

priorities were expressed by respondents in two ways: by naming personnel groups for whom training was planned (for example, training of administrators, training of resource room personnel), and by describing topical content of the training (for example, classroom management, adult education skills). Table 7 shows priorities according to the personnel roles of the targeted participants (or, in some cases, new roles for which participants are being prepared). Table 8 shows priorities according to topical content, which might be designed for several of the participant groups shown on Table 7.

Table 7 does not correlate well with Table 1 (which shows types of preservice programs that are absent from jurisdictions). This would be expected, because inservice training is not going to close these gaps, and because even the presence of several preservice programs in a given specialty is no guarantee that jurisdictions are not continuing to struggle with manpower supply and demand problems in that specialty, through inservice, retraining, provisional certification, out-of-state recruitment, and other means. Table 7 bears more relationship to Table 3 (which shows consistent shortages in instructional and service categories). On the basis of this latter comparison, one might guess that 30 to 40 percent of the predominant inservice offerings geared to personnel roles may address manpower issues, while the remainder may be designed to upgrade and update practitioners' skills.

While the following pages give an overview of inservice emphases in the 54 jurisdictions surveyed, these priorities were reported only after a number of programs had been eliminated or modified downward in the wake of state budget cuts and the diminishment of federal funds for inservice education of special educators and regular educators. For example, the only training available to Illinois' 200 teachers of the visually impaired had been a statewide institute that had to be eliminated when federal Part D funds were reduced. Although the state education agency is attempting to coordinate another institute through a chapter of the Council for Exceptional Children (with charges for participant fees), the training would take on the characteristics of a convention, and even this outcome was uncertain at the time of the survey. In Illinois and many other jurisdictions, therefore, priorities shown on Tables 7 and 8 do not illustrate all inservice needs, but simply those that it was possible to address. (Further effects of fiscal downturns are set forth in greater detail in Chapter 6.)

Inservice Participants

Personnel roles of participants who are intended recipients of inservice offerings appear on Table 7, whose horizontal headings indicate either the position (regular educator, administrator, paraprofessional, psychologist, counselor, and so on) or the specialty role (personnel for education of the severely handicapped, personnel for vocational education of the handicapped, and so forth). The "overall special education" category subsumes inservice forums which combine many types of personnel. The fact that only one jurisdiction (Nebraska) cited inservice training for resource room personnel may mean that other resource room personnel were included in the "overall special education" group. Omitted are North Carolina's and Alabama's reports of inservice priorities for teachers of the gifted, as this survey did not uniformly elicit information on gifted and talented education.

Pennsylvania's two entries on Table 7 reflect the state's long-term program of professional development, whose emphasis has sequenced over time from special education inservice, to regular education inservice, and now to a concentration on parent training. The state's Comprehensive System of Personnel Development is being replicated at the local district level, and districts address state inservice priorities, as well as their own priorities with 5 percent of their Part B flow-through money or its equivalent.

Jurisdictions that single out related services personnel, psychologists, and other interdisciplinary specialists for inservice are often using this training to teach these people how to apply their expertise in the educational setting. Such training becomes necessary when specialists receive preservice preparation on campuses where no interdepartmental collaboration has been achieved to merge the training of educators, therapists, and related disciplines at any point.

Notable by its absence is inservice training for personnel in state education agencies, an omission accentuated by states' fiscal difficulties and felt keenly by many participants in this survey: "No training is provided to me except by the National Association of State Directors of Special Education's Part VI-D planning meeting. State education agency people get no training; we go by the seat of our pants." (Another source of professional development for state CSPD coordinators, the Cooperative Manpower Planning Project of the University of Missouri-Columbia, did not receive federal funds to operate during fiscal 1982-83 when this survey was conducted.)

Table 7. Inservice Priorities: Target Participants

	REG ED	ADM	SPH	OVERALL SP ED	VOC	ED-BD	SMLT	LD	SEC	EC	PTS OR SUPVRS	SED	VH	HHMD OFFICER	PARA
Alabama	X	X						X							
Alaska	X	X		X							X			X	
Arizona	X		X	X			X								
Arkansas				X				X	X						
California	X		X							X	X				
Colorado	X		X	X	X	X	X			X	X				X
Connecticut	X				X					X					
Delaware	X	X			X		X	X	X			X			
Florida	X		X							X					
Georgia	X	X		X											
Hawaii				X									X		X
Idaho	X	X		X	X	X			X			X			
Illinois	X	X	X				X					X	X		
Indiana	X					X					X	X			
Iowa	X	X	X	X	X	X		X	X	X			X		
Kansas		X	X			X				X	X		X	X	X
Kentucky	X			X											
Louisiana	X	X	X		X		X					X	X		
Maine	X		X								X				
Maryland	X		X		X	X	X	X		X		X			
Massachusetts	X		X										X		
Michigan	X														
Minnesota			X				X			X		X			
Mississippi	X	X		X											
Missouri		X		X	X	X		X		X	X		X	X	
Montana	X	X	X	X		X	X	X		X		X		X	
Nebraska	X	X	X	X	X	X	X	X	X						X
Nevada	X		X		X		X		X		X				
New Hampshire	X	X	X	X	X	X	X		X	X	X	X		X	X
New Jersey	X														
New Mexico	X	X		X	X						X				
New York	X	X		X	X				X		X				
North Carolina	X	X	X		X							X	X	X	X
North Dakota	X					X			X						
Ohio	X				X										
Oklahoma	X														
Oregon	X								X						
Pennsylvania	X										X				
Rhode Island	X	X		X	X			X	X						
South Carolina	X		X		X		X							X	
South Dakota		X		X											
Tennessee	X	X	X		X	X				X			X	X	
Texas			X									X			
Utah	X		X				X	X	X			X			
Vermont	X		X			X	X	X	X	X					
Virginia	X	X	X	X	X	X	X	X	X	X	X			X	X
Washington	X														
West Virginia		X													
Wisconsin	X		X	X	X	X	X	X	X	X	X				
Wyoming	X	X		X	X	X		X							
Guam	X		X												X
Puerto Rico	X	X				X	X	X							
BIA	X	X		X											
Distr. of Columbia				X				X							
N =	45	25	25	23	21	17	17	16	15	15	14	12	9	9	8

Table 7 (Continued). Inservice Priorities: Target Participants

	PSY	REL SERV	TRAINERS	EPCH	HH	BIL	HIGHER ED	PE	CURR COORD	BD OF EDUC	TCHR MINORITY	COUNS	CONH	SOC WORKER	REG
Alabama															
Alaska	X					X									
Arizona															
Arkansas															
California			X			X									
Colorado				X											
Connecticut															
Delaware	X														
Florida															
Georgia									X						
Hawaii		X			X										
Idaho															
Illinois			X			X							X		
Indiana								X							
Iowa	X				X										
Kansas			X		X										
Kentucky															
Louisiana		X			X		X							X	
Maine				X											
Maryland									X						
Massachusetts					X										
Michigan						X									
Minnesota															
Mississippi															
Missouri	X	X			X										
Montana	X		X	X			X		X			X			
Nebraska	X	X		X			X			X					X
Nevada				X				X							
New Hampshire		X	X	X			X								
New Jersey															
New Mexico															
New York		X	X			X				X					
North Carolina															
North Dakota															
Ohio															
Oklahoma											X				
Oregon															
Pennsylvania												X			
Rhode Island		X				X		X							
South Carolina															
South Dakota															
Tennessee	X		X	X			X		X						
Texas															
Utah															
Vermont															
Virginia															
Washington															
West Virginia								X							
Wisconsin			X				X	X		X	X				
Wyoming															
Guam															
Puerto Rico	X	X													
BIA															
Distr. of Columbia															
N =	8	8	8	7	9	6	6	5	4	3	2	2	1	1	1

Other entries on Table 7 should be self-explanatory. Interpretation of its contents will center on the more predominant personnel groups targeted for inservice participation.

Regular educators and administrators. In a 1977 survey of inservice priorities in 50 states, the District of Columbia, and the Panama Canal Zone (Klein, Howell, and Smith, 1978), the most consistent targets of inservice education across jurisdictions were special education teachers, followed closely by special education administrators. Inservice to train regular educators and administrators in education for the handicapped represented a third and fourth priority (p. 196). In 1977, of course, inservice training was still heavy with compliance issues introduced by Public Law 94-142 upon its enactment in late 1975, but one of those issues was (and is) the placement of handicapped children in the least restrictive environment for educational purposes. Also in 1977, regular educators at both the inservice and preservice levels comprised a priority for federal spending in personnel preparation, and federal funds had established the National Inservice Network at Indiana University to stimulate and support the efforts of state and local regular education inservice projects.

Six years later, the federal emphasis on regular education inservice is no more; the National Inservice Network is out of business; and many participants in the current survey report marked reductions in (or unavailability of) state funds for inservice, or conditions that prevent uses of any Part B funds to supplement inservice efforts, or both.

Nonetheless, Table 7 shows that training for personnel in regular education (REG ED = 45; rank = 1) was far and away the greatest single thrust of inservice concerning education of the handicapped in the United States in 1982 and, in this survey, classroom teachers far outnumbered administrators as intended recipients of this training. This emphasis follows the trend in many jurisdictions to place more and more handicapped children in regular classrooms and/or in resource rooms.

Other factors also contribute to this emphasis. As money disappears from education budgets, efforts intensify to determine who is handicapped and who is not, in terms of eligibility for more costly special services. Part of this effort involves making regular educators aware that their identification and referral of problem students does not necessarily mean that these students will leave their classrooms, and training regular educators in alternative instructional methods. As one spokesperson put it, "Regular education wants to refer its problems into special education. They want to give us slow learners, drug

addicts, homosexuals, alcoholics, and unwed mothers. We need to do a lot of work with regular education in order to put these students in the right educational placements."

Another factor is apparently a newfound motivation among some regular educators to seek preparation for teaching handicapped students. In jurisdictions where reductions in force have occurred or are expected, regular educators are said to view special education training as one means for preserving their employment. On the other hand, the report from Wyoming suggests that regular educators are becoming critical of what they see as special education's failure to produce. "We gave a one-week workshop on curriculum materials for the handicapped, and half the people who enrolled were regular educators who were tired of seeing no results from resource rooms. There are loud complaints about this."

The emphasis on regular education inservice also stems from a perception that cooperation and mutual activity between regular educators and special educators is lacking, and a corresponding effort to do something about it (notably through teaming of inservice participants) for the benefit of the handicapped students they serve in common.

The administrators engaged in inservice training in this survey (ADM = 25; rank = 2) represent both directors and supervisors of special education, and building principals and other supervisory personnel associated primarily with regular education. The latter participation further underscores the emphasis on training personnel from regular education in the principles and practices of educating handicapped students.

Personnel for low-incidence populations. The second largest participant cluster identified for inservice is comprised of personnel who serve the severely retarded (SPH = 25; rank = 3) and multiply handicapped (MULT = 17; rank = 7). In the 1977 survey (Klein, Howell, and Smith, 1978), out of 16 exceptionalities emphasized by inservice training, the most frequently cited was "severely/profoundly handicapped," while "multiple handicaps" ranked fifteenth. In 1977, newly prepared personnel to serve these populations were only beginning to graduate from new preservice programs established in response to Public Law 94-142 and the stimulus of federal funding. Six years ago, programs for severely, profoundly, and multiply handicapped children were only at their inception.

Results of the current survey include some continuing efforts to retrain and/or fully certify personnel for the education of severely retarded and multiply handicapped students. The more

common explanation for this priority is, however, the effort to specialize personnel whose preservice preparation in cross-categorical or noncategorical programs did not include a strong emphasis on dealing with the more severe handicaps in their specialty areas. Participants expressed this concern repeatedly, regardless of whether or not these personnel had been targeted for inservice in their jurisdictions. In the words of the respondent from North Carolina:

> "Cross-categorical training can be dangerous if it gets out of hand, and the same can be true for non-categorical training. It can get too general and lack depth. Practice shows that teachers need more precise abilities in curriculum content and teamwork. When you get to the severely handicapped, teachers need to know very specific things about these students' processing and must have very precise skills to work with different disabilities. There are some recommendations that generic training should be offered only at the master's level to people who have already had experience in some very precise categorical situations."

In Montana, which has noncategorical programming in its classrooms and in higher education, this problem has long been acknowledged and dealt with. The noncategorical approach presents an advantage in staffing programs, but "the amount of in-depth specialization in any handicap is limited in this kind of broad-based training. So the inservice focus is to sharpen precision skills for working with specific problems. Because of the nature and long history of our certification pattern, things have stabilized and are coordinated to provide the training on the job."

Among the 25 jurisdictions reporting inservice with emphasis on personnel for the education of severely retarded students, 13 also reported consistent shortages of these personnel (see Table 3), and three reported no program preparing personnel in this specialty (Table 1). Consistent shortages of personnel to educate multiply handicapped students were reported in 9 of the 17 jurisdictions that emphasize inservice education for these specialists (Table 3) and, in this case, 7 of these 17 also reported no training program in multiple handicaps.

Other handicaps that are of relatively low incidence are visual impairment, hearing impairment, crippling conditions and other health impairments. Five of the nine jurisdictions emphasizing inservice for personnel in vision also report consistent shortages of personnel (Table 3), and four report no preservice programs (Table 1). Of the six jurisdictions where inservice for specialists

in hearing impairment is a priority, five report shortages of these personnel (Table 3) and two report no preservice programs (Table 1). With regard to crippled and other health impaired (COHI), instances of shortages and inservice emphases were negligible in this survey.

The relationship between inservice priorities and shortages (based on comparisons of Tables 3 and 7) suggests that considerable inservice in low-incidence specialties is indeed the attempt to add personnel to the work force. The same assumption can be made for several other of the predominant inservice priorities.

Personnel in secondary schools. Vocational educators for special education (VOC = 21; rank = 4) and secondary personnel (SEC = 15; rank = 9), taken together, comprise the third largest group of inservice recipients. This group includes still more regular educators, inasmuch as some of the vocational educators participating are regular vocational teachers being trained to serve the handicapped, and some of the secondary people are high school or junior high school teachers being retrained for special education roles.

In 1977, in a list of 30 inservice training areas, "vocational/career education" ranked eighth in frequency among 52 jurisdictions, while "secondary programs" ranked thirteenth (Klein, Howell, and Smith, 1978, p. 195). By 1982, the elementary-level students of 1977 were entering the secondary schools, and secondary education for the handicapped had become a genuine problem in many jurisdictions, particularly with regard to the shortage of properly trained personnel. Among the 15 jurisdictions prioritizing inservice for secondary personnel, 9 also report shortages of the same personnel (Table 3); whereas preservice concentrations in secondary special education are not abundant, due to lack of similar emphasis in certification requirements, the majority of respondents questioned the adequacy of attention devoted to secondary coursework and practical experience in preservice preparation programs. Of the 21 jurisdictions offering inservice for vocational educators, seven report shortages of personnel in vocational special education (Table 3), and one reports no preservice program (Table 1).

Personnel for education of emotionally disturbed/behaviorally disordered students. The fourth largest cluster of inservice recipients is comprised of personnel to educate emotionally disturbed/behaviorally disordered students (ED/BD = 17; rank = 6) and severely emotionally disturbed students, including the autistic (SED = 12; rank = 12). In 1977, "emotional disturbance"

(without delineation of severity) was one of three areas of exceptionality ranking third in frequency of inservice emphasis (with "learning disabilities" and "visual impairment") (Klein, Howell, and Smith, 1978).

With regard to emotional disturbance/behavior disorders, 13 of the 17 jurisdictions emphasizing inservice also report personnel shortages (Table 3), and four report no preservice preparation programs (Table 1). Among the 12 jurisdictions with priorities for inservice in severe emotional disturbance, 7 report shortages of these personnel (Table 3).

Overall special education personnel. Inservice for mixed groups of special educators generally endeavors to improve their skills (OVERALL SP. ED. = 23; rank = 4). Arizona, for example, reports training in more specific skills, such as adaptive mealtimes, teaching of written language skills, and similar topics. In other cases, personnel are receiving training in a second or third specialty to qualify them to work with multicategorical groups.

Topical Content

Table 8 shows topics which form the focus of inservice in the 54 jurisdictions participating in this survey. Content was not always specified in relation to inservice participants (shown on Table 7). For example, where Table 7 shows that some jurisdictions provide inservice for administrators, the content of their training is not delineated, but the 30 content priorities for all jurisdictions are shown on Table 8. Of particular interest for interpretation are the content features concerned with issues of compliance with Public Law 94-142; inservice in adult education, inservice processes, the Comprehensive System of Personnel Development; the sharpening of skills for instruction of children with low-incidence handicaps; training in technologies; and continuing emphasis on traditional special education skills.

Compliance issues and the IEP. Jurisdictions generally reported a cessation of the need to provide inservice instruction on most issues relevant to compliance with Public Law 94-142. Table 8 shows that this is true, with a few notable exceptions.

A major compliance issue is that of "least restrictive environment," a topic that now ranks first across the 54 jurisdictions (LRE/MAINSTREAM = 43), but which ranked tenth (termed "mainstreaming") in the 1977 survey (Klein, Howell, and Smith, 1978). This topical priority coincides with the top ranking of regular educators as targets for inservice in Table 7 and underscores the movement of handicapped children toward regular education.

Whereas legislation and regulations comprise the content for an inservice priority in 14 jurisdictions (LEGIS-NEW RULES; rank = 9), several provide this content as a means for imparting information on new rules that have been issued recently by state legislatures or mandated by the courts. In these instances, the legislation/regulations content priority is not considered to be a continuing compliance issue stemming from Public Law 94-142. Due process also continues to be a content priority (DUE PROCESS = 12; rank = 13), as does the issue of procedural safeguards (PROC SAFEGUARDS = 8; rank = 22).

Of greatest interest, however, is the continuing inservice emphasis on the Individualized Education Plan (IEP), reported as a priority by 21 jurisdictions and relayed as a major concern by many others. In the 1977 survey (Klein, Howell, and Smith, 1978), when the IEP was a relatively new procedure, it ranked fourth in a list of most frequent topics of inservice training (p. 194). In the current survey, it continues to rank fourth and, if all of the additional expressions of concern had been manifest in actual inservice priorities, it would have ranked higher still.

When queried as to why this compliance issue continues in the forefront, many jurisdictions reported that the concern centered on a problem of inexperience and lack of skill in the participatory and interdisciplinary processes involved in developing and implementing an Individualized Education Plan. Representative of the overall commentary is the following:

> "One of our major inservice needs is the IEP (present level, goals, and objectives). We get so many requests for this training. People are being cited in compliance visits. As more districts come into compliance, it throws this into relief. There are more citations as we look at quality. The training involves regulations issues, but mainly team processes and communication. Team meetings are a disaster. People have not been taught to work on teams and can't find the time. They don't know how to plan."

Another jurisdiction reports that "monitoring has revealed that child progress is lower than the objectives set for the child and that there is a need to tie assessment more closely to the IEP. This is partly a problem in teaming and communication. Inservice is focusing on refining IEP's, upgrading their quality, and tying educational and psychological assessment more coherently to actual IEP objectives."

Closely related to the IEP topic is the inservice emphasis on preparing special educators to consult with and team with regular

Table 8. Inservice: Topical Content

	LRE MANDATE	SP ED MATH TOPICS	SPN SKILLS	IEP	CONSULT W REG ED	SCREEN ASSESS DIAG	PARENT INVOLVE DEVELOP	VOC STRATEG	LEGIS-NEW RULES	BEH MGMT	COMPUTER TELECOMM VIDEO	PUPIL EVAL	BAE PROC	CLASS MGMT	LB-IDENTIF CURR DEVEL
Alabama	X				X					X		X		X	X
Alaska	X	X													
Arizona	X	X	X	X			X			X			X		
Arkansas		X													
California	X		X	X	X				X		X				
Colorado		X	X		X		X				X				
Connecticut	X			X	X			X							X
Delaware	X					X		X							
Florida	X		X	X	X										
Georgia	X												X		
Hawaii															
Idaho	X	X	X		X			X							
Illinois	X		X		X									X	
Indiana	X			X					X	X				X	
Iowa	X	X	X	X	X		X	X	X		X			X	X
Kansas		X	X	X	X	X	X		X	X	X	X	X	X	
Kentucky	X														
Louisiana	X		X												
Maine	X		X		X	X						X			
Maryland	X		X			X	X	X	X		X		X		X
Massachusetts	X		X						X						
Michigan	X			X											
Minnesota		X	X												
Mississippi				X		X	X		X			X			
Missouri		X	X			X	X	X					X		X
Montana	X	X	X		X		X				X				
Nebraska	X		X		X	X		X			X	X			X
Nevada	X	X	X	X	X	X		X					X	X	
New Hampshire	X				X	X	X		X						
New Jersey	X	X		X	X	X	X	X	X	X					
New Mexico	X	X		X	X	X		X	X	X			X	X	
New York	X	X													
North Carolina	X	X		X		X									
North Dakota	X			X		X									X
Ohio	X			X	X		X					X	X		
Oklahoma	X														
Oregon	X														
Pennsylvania	X	X		X	X	X	X	X	X	X	X	X	X	X	
Rhode Island	X			X			X			X	X				
South Carolina	X		X			X		X		X					
South Dakota		X									X				
Tennessee	X	X	X	X		X	X		X	X	X	X	X		X
Texas			X							X					
Utah	X		X												
Vermont	X		X						X						
Virginia				X				X							
Washington	X														
West Virginia	X	X		X	X		X		X	X		X	X	X	
Wisconsin	X	X	X		X	X	X	X		X		X			X
Wyoming	X	X		X							X	X	X	X	
Guam	X	X	X												
Puerto Rico	X	X										X		X	
BIA	X	X													
Distr. of Columbia											X				X
N =	43	24	24	21	20	17	16	14	14	13	13	12	12	11	10

Table 8 (Continued). Inservice: Topical Content

	PROGR EVAL	WRITE CHANGE	INTER AGENCY	ADULT ED-IRS PROCESS	SPEECH LANG STRAT	EC. LANG DEVEL	PROC SAFE-GUARDS	CSPD	HOMBIASED ASSESS	ARTS	READ T	RECREATION	CONSORTIUM PLANNING	MOTOR DEV	ALTERNA SCH STRUCTURE
Alabama						X									
Alaska															
Arizona					X										
Arkansas				X											
California				X				X	X						
Colorado			X	X				X							
Connecticut						X		X							
Delaware															
Florida															
Georgia												X			
Hawaii															
Idaho								X							
Illinois	X			X								X			
Indiana															
Iowa		X			X	X	X							X	
Kansas	X		X	X			X		X	X			X		
Kentucky															
Louisiana															
Maine				X	X							X			
Maryland						X									
Massachusetts	X			X											
Michigan															
Minnesota															
Mississippi		X													
Missouri	X	X	X			X	X		X		X		X		
Montana			X			X									
Nebraska	X	X		X	X	X		X			X				
Nevada															
New Hampshire	X		X												
New Jersey							X								
New Mexico					X				X						
New York			X												
North Carolina											X				
North Dakota															
Ohio		X													
Oklahoma															
Oregon															
Pennsylvania		X					X				X				
Rhode Island		X													
South Carolina										X			X		
South Dakota															
Tennessee	X		X		X		X			X					
Texas								X							X
Utah															
Vermont															
Virginia		X			X	X				X					
Washington															
West Virginia	X		X		X		X	X						X	X
Wisconsin	X	X	X	X					X	X					
Wyoming							X		X	X					
Guam															
Puerto Rico															
BIA															
Distr. of Columbia															
N =	9	9	9	9	8	8	8	7	8	6	4	3	3	2	2

educators and interdisciplinary personnel (CONSULT W/REG ED = 20; rank = 5). Major aspects of inservice training subsumed here are process skills, interdisciplinary team cooperation, communication, use of information from various professionals, and cooperative planning. Among the 20 jurisdictions reporting this priority, nine were in addition to the 21 that prioritized inservice surrounding the IEP. Therefore, the number of jurisdictions seriously concerned about lack of personnel skills in these interprofessional processes totals 30, raising this overall concern to second ranking among all topics for inservice training.

Adult education, inservice processes, and the CSPD. Eight jurisdictions specified trainers as targets of inservice (Table 7), and Table 8 shows that nine jurisdictions (rank = 19) include adult education or training on inservice processes as a priority topic. Seven others provide inservice training on the Comprehensive System to Personnel Development (CSPD; rank = 23). Some of this training centers on assisting districts in initiating their own professional development systems. Maine and Colorado are particularly continuing the inservice planning and development procedures originated there by the National Inservice Network several years ago. Overall, this training priority represents expanded endorsement of district-based, school-based, locally planned and delivered inservice in these nine jurisdictions, as well as in others that have not made it an inservice priority. "More and more we believe in locally based inservice. The closer to home and the more individual, the better. The use of people in the natural environment is very effective."

This emphasis also reflects the diminished capacity of state education agency people to deliver inservice and assistance as they once did before state staffs and budgets began to decline. To show how far many state department staff members are being stretched, consider the plight of Mississippi:

> "Mississippi's $52,480 in Part D funds is used to support the state education agency staff in their efforts to assist districts. A small complement of state department manpower does a very large amount of work on this amount of money. In July (1982), a new placement procedure was initiated as a result of litigation. (The Mattie T. consent decree of April 1975 challenged that students were misplaced in classes for the mentally retarded because no services for physically handicapped pupils were available.) The resolution of this case has required a new process: before referral, an instructional intervention must take place and the classroom environment

> must be modified in an attempt to meet the needs of the student. Further, there must be a comprehensive assessment of every child referred in the following areas: physical, speech/language, behavioral/social, emotional, educational. *One state education agency staff person will carry out over 40 workshops this school year to coordinate and train personnel to comply with these new requirements.*"

Sharpening skills for teaching the severely handicapped. Whereas 25 jurisdictions directed priorities for inservice education to personnel serving the severely retarded, and 17 assigned this priority to personnel serving the multiply handicapped (Table 7), 24 jurisdictions reported that content designed to add precision skills in instruction of the severely handicapped was a priority (SPH; rank = 3). This topical focus reinforces the earlier statement of the need to add depth to the skills of these personnel (a need that will be further pursued in relation to preservice preparation at the end of this chapter).

Technologies. Only 13 jurisdictions (COMPUTER, TELECOMMUNICATIONS, VIDEO; rank = 11) reported an inservice emphasis on content concerning new informational and instructional technologies. Although some others are using such technologies for delivery of inservice, it was surprising that a relatively small number were training personnel to use them. This lack of emphasis may stem, in part, from a lack of "buyers," or consumers sophisticated enough to demand it. It may also indicate that issues of manpower quality and quantity supersede training in these innovations during a time when even fundamental needs have had to be curtailed.

Traditional special education skills. Priority content for inservice also includes behavior management (BEH MGMT = 13; rank = 10), pupil evaluation (PUPIL EVAL = 12; rank = 14), and classroom management (CLASS MGMT = 11; rank = 16). The fact that such topics appear on national assessments of training needs year after year raises a few eyebrows and provokes questions as to whether or not personnel will ever master these basic teaching skills. More to the point, however, is to examine the relatively large numbers of provisionally certified personnel in special education, as well as those teaching students whom they have not been prepared to deal with. Considering these contingencies, it is surprising not that traditional instructional topics continue to be needed in inservice, but that they are needed no more frequently than this survey would indicate.

Delivery of Inservice

The predominant mode of inservice delivery reported in this survey is the use of small local or regional workshops. The use of large statewide meetings seems to be declining, possibly as a result of cuts in travel budgets.

A number of jurisdictions report a reliance on higher education for the delivery of inservice, both on the campus and in the districts. Indeed, in one state "inservice is primarily the universities applying for Part D funds to meet state needs." This reliance is not without its problems, however. For one thing, there are frequent reports that higher education people are not as willing to travel around a state as they may once have been and that university outreach programs have become relatively inactive as funding disappears. For another thing, in jurisdictions where the state education agency or other administrative staff have suffered reductions in force, there can be little supervision and coordination of the training effort, and 15 to 20 colleges and universities may be providing inservice education with no guarantee as to the consistency and quality of the information and techniques that are conveyed.

Thirteen jurisdictions report a growing emphasis on local processes for needs assessment, program planning, and program development of inservice, largely by means of technical assistance to districts in adopting the Comprehensive System of Personnel Development at the local level:

Colorado
Florida
Indiana
Kansas
Maine
Maryland
Minnesota
North Carolina
Pennsylvania
Utah
Vermont
Washington
West Virginia

School-based planning and inservice delivery are featured in:

California
Colorado
Florida
Maryland
Nevada
North Carolina
Ohio
Rhode Island
West Virginia
Wyoming
Guam

Eight jurisdictions report widespread use of instructional television or other telecommunications media for delivery of inservice. Alabama, Alaska, Maryland, Maine, and Virginia make extensive use of instructional television, while California, Montana, and South Dakota deliver inservice via telephone conference arrangements.

Four respondents (in Connecticut, Florida, Illinois, and Wisconsin) report the use of special study institutes to bring about training in crucial instructional areas. Wyoming focuses its training on teams of personnel (e.g., a special educator, a regular educator, an administrator, and persons from other disciplines, as indicated), and Connecticut, Nevada, Ohio, Utah, and Wyoming combine inservice with supervision by consulting teachers or master teachers. Nebraska has plans to tie its professional development programs with school improvement agendas in local districts.

Unions and inservice delivery. The influence of the American Federation of Teachers and the National Education Association on professional development fluctuates from jurisdiction to jurisdiction. Many report no particular influence, while a few report considerable interference, which is more apt to take place in major metropolitan areas. In many locations, it is necessary to negotiate inservice plans, including release time requirements, with unions, a procedure that tends to burden administrators who are otherwise supportive of inservice. The unions frown on teachers' taking their own time for inservice education, and unions have forbidden training activities on weekends in some localities. At least one state has had to require its trainers to have administrative credentials in order to get them out of the teachers' unions so that they can function. On the other hand, some jurisdictions report excellent liaisons with unions for delivery of inservice. In large metropolitan areas, it is not unusual for major inservice activities to be carried under a special contract with the union, which then provides training to its membership. More common perhaps is what is termed "indirect influence," e.g., "If the district does inservice, they either have to do it on district time or give substitutes or pay the trainees. This costs us $20,000 to go through the district for training. But when the Council for Exceptional Children sets up training in the state, it costs only $4000 to $5000, the trainers do a good job, and everyone benefits from it."

Evaluation. Regardless of the delivery model, the weakest link in the inservice process tends to be follow-up to evaluate the effectiveness of training and to offer further instruction or assistance to participants. Indeed, it is the follow-up component that has most often been eliminated in recent years in the attempt to preserve training while state funds dwindle and federal dollars take other priorities.

Selected inservice delivery models. As a cross-section of approaches to delivery of inservice, the following brief descriptions

are intended as a sample of programs and projects that have been developed by various jurisdictions reported in this survey.

• *Arizona's* SELECT model, initiated in the mid-1970's by the state education agency in cooperation with higher education, continued with a thrust that is now primarily rural. In the SELECT system, individual training priorities are assessed and the subsequent training is highly individualized and relevant Cooperation is elicited from all agencies concerned with the preparation of educational personnel. A broad and varied menu of inservice offerings is published for participant selection, and training is provided at many local sites across the state through cooperative arrangements with a university, through which credit is granted. This model has been adopted in many jurisdictions and is currently in operation in Hawaii.

• *Alaska.* Because of the difficulty in locating specialized personnel to serve low-incidence populations of handicapped children in Alaska's remote bush villages, the state has funded Alaska Resources for the Moderately to Severely Impaired, Inc., to deliver direct services, training, demonstration, and technical assistance to these children, their parents, teachers, and administrators across the state. A staff of approximately 15 professionals with experience in instruction of low-incidence children are headquartered in Anchorage and deployed thousands of miles by small plane and dogsled. A significant portion of their work concerns local planning with Eskimos, Indians, and Aleuts, and data are being gathered to demonstrate the effectiveness of the project in improving service delivery locally and in accelerating the learning of more severely handicapped children.

• *California* operates a Special Education Resource Network (SERN) that consists of 13 regional units that employ a network of regular education teachers, special education teachers, and parents who act as trainers throughout the state. This network is coordinated and supervised by the state education agency and funded with state dollars, Part B and D federal dollars. Currently, California is putting a Resource Service Center (a unit to serve all of the 13 SERN's) on the campus of Sacramento State University. This Center will develop programs, communicate with units, offer support, help develop programs, and provide materials and media throughout the state. Locating the unit on a campus will make possible mutual access and collaboration with university departments, and can incorporate graduate students and faculty members into the work of the network. The state has plans to locate other SERN activities on higher education campuses in the future as part of its goal of developing a continuum

of activity between preservice and inservice education of special educators.

• *Colorado* has been a beneficiary of the inservice planning team process initiated there by the National Inservice Network. In this model, the process of identifying needs and planning to meet them is the priority and local ownership is the byword. At this point in the evolution of the model, preservice quality concerns intertwine with staff development issues at the local level. Accordingly, Colorado is adding the involvement of higher education to its local process activities. Volunteers from higher education institutions are assigned to the local school districts as part of a team and not as consultants. The concern is with the immediate, practical everyday needs of the classroom teacher and the children who receive instruction.

• *Guam* several years ago started a public school program for deaf-blind pupils, at a time when there were approximately 100 rubella children on the island. When the program was begun, Guam mounted a special inservice training program for teachers and aides who continue to serve these children. Even though no preservice training for this multiple handicap was available on the island, no problem has arisen because the need for training has been met at the inservice level.

• *Louisiana* sponsors a tuition exemption whereby teachers can take college courses at no cost as long as they want to, as long as the coursework is field-related. This is how most teachers obtain their master's degrees in Louisiana.

• *Massachusetts.* There is no special certification for special education in vocational education, but it is the responsibility of the school district to ensure that incumbents to such positions have the proper background. This determination has been ambiguous at best. So the University of Massachusetts has started an 18-hour program on the basics of vocational education for special educators. This does not provide a state credential but it adds formal background to one's transcript and resume, so that local districts can more properly fulfill their responsibilities in attaining personnel with the right background. Massachusetts has found this arrangement to be very needs responsive and anticipates its application to bilingual and multicultural qualifications, as well.

• *Montana's* noncategorical programming and preservice training necessitate on-the-job training to sharpen the skills of teachers assigned to severely handicapped and sensorially impaired pupils. Until recently, Montana's deaf, blind, and deaf-blind children have been in state institutions, but now the state

has a network of specialists in cities and towns across the state, as well as a state education agency liaison in the area of deaf-blind education. These specialists give inservice and continuous technical assistance to teachers of the severely sensorially impaired in public school settings. The training sharpens their skills and improves instruction of these low-incidence populations.

• *Nevada's* state education agency operates a Rural Assistance Project, which provides training, technical assistance, consultation, and many other services and materials. The project uses the services of consulting teachers, as well as the services of people on retainer from the University of Nevada and from the mental health community, to deliver services and improve instruction for handicapped children in rural areas of the state.

• *North Carolina* has initiated Teacher Assistance Teams to identify needs and to plan and develop inservice. These building-based teams have also begun to serve in identifying needs for adoption of new instructional models and show promise of streamlining many aspects of innovation and school improvement. The state's plan is to replicate the Teacher Assistance Team concept in all of its eight educational regions.

• *Ohio's* Comprehensive System of Personnel Development provides for inservice training, development of preservice programs and curricula, and interface of inservice and preservice. The inservice component is planned and implemented through sixteen regional Instructional Resource Centers (IRC's) and one statewide IRC. These centers operate under the direction of regional governing boards and the Ohio Division of Special Education. Development of preservice programs and curricula is accomplished through the cooperative planning of Ohio's teacher training institutions and the Ohio Division of Special Education.

Each plan for inservice developed by the 17 IRC's in Ohio is reviewed and approved by their respective governing boards, which are composed of superintendents of schools, special and general education personnel, at least two parents of handicapped children, a representative from a nonpublic school, a representative from the county boards of mental retardation/developmental disabilities, and representatives of universities in the region. The IRC projects, including the plan for inservice training, are submitted annually to the Ohio Division of Special Education for review and approval. Each IRC is required to coordinate its inservice functions with the preservice activities of the institutions of higher education operating within its region.

• *South Dakota's* state department of education took $10,000 and went to the South Dakota Education Association and asked them to take $500 to $750 per grant and get teachers to describe what they would like to do with this amount of money. Teachers are using the mini-grants to visit other classrooms or schools; to bring help to their classrooms from specialists; to get together with three or four other teachers to improve some aspect of the instructional program; to complete self-studies by identifying weaknesses to work on and plans to remedy them; and to accomplish a number of other activities that improve instruction for handicapped pupils.

• *Utah* has a very large inservice program for special education, with trainers from the ranks of its psychologists, physical educators, special educators, regular educators, and others. Districts plan inservice with technical assistance from the state education agency in a joint effort that follows the plans in the districts' applications for state funds. The results have been better qualified teachers, fewer complaints, fewer due process hearings, and improved service delivery systems.

Quality vs. Quantity

In many respects, it would appear that by 1980 a number of jurisdictions were working on objectives related to quality in personnel and quality in education (as opposed to struggles for numbers and compliance). Subsequent events in state and federal economic and policy changes have thrust a great deal of this effort back to concerns with quantity and new concerns with changing programs and stretching personnel and dollars. If, in a few years, continuing attrition, preservice losses, and declining preservice enrollments create the expected additional shortages in personnel, then states and districts will remain ever more submerged in these problems, at the expense of the quality that many of them had defined and set out to achieve at the beginning of the decade.

To complicate matters, forward funding patterns have forced many jurisdictions to respond to threats of policy and budgetary changes before they became real. In some instances, changes and cutbacks made in the summer of 1981 became less necessary (but irreversible) as the year unfolded and Public Law 94-142 was not included in a block grant, as threatened, nor reduced in its Part B funding. In other words, we are in some sense and in some situations seeing the effects of what is threatened and intended, rather than what eventually emerges in reality. Respondents describe this in terms of walking a tightrope. The future is unclear, and so planning focuses on the short run.

The conflict between quality and quantity brings both good news and bad. On the plus side, the fiscal crunch is prompting jurisdictions to examine methods and models of instruction and teacher training more critically so as to spend available dollars on programs that work and whose effectiveness can be demonstrated. At the same time, it is acknowledged that continuing fiscal incursions may force decisions too far in the other direction and minimize the opportunities for developing quality programs.

Also on the plus side are positive reports that a few rural districts are at last receiving more plentiful applications from qualified teachers who have been laid off in other parts of the country. Because of these out-of-state applicants, there may be more pressure on home-grown teachers to upgrade their own skills. Yet this phenomenon is not widespread and is not expected to ease the strain of perpetual manpower problems in rural and remote schools, nor the parallel problems in inner city schools.

Still other good/bad news comes from the jurisdictions where program expansion is continuing. For example, Puerto Rico has since 1979 been working on mainstreaming and on programs for handicapped students at the intermediate and secondary levels, including prevocational centers for handicapped students. Puerto Rico is just beginning to advance in these directions, and this accounts in part for its shortages of teachers and other instructional personnel. This jurisdiction is beginning to feel the effects of these shortages on the quality of the programs that have been planned.

Even where program expansion is not a feature in the educational landscape, the struggle for numbers of personnel frequently interferes with quality of education. Interferences include not just problems of unfilled positions, but also the numbers of conditionally certified people and the categorically certified personnel placed in noncategorical resource rooms, a practice reported as prevalent earlier in this document. Similarly, manpower shortages create an atmosphere in which districts will take what they can get, whereas they would prefer to be able to choose among candidates in ways that would strengthen, rather than weaken, the overall educational program. Moreover, stronger standards, such as those suggested by teacher tests and other new certification requirements, may raise the caliber of candidates but will probably also reduce an already shrinking manpower pool, unless other incentives emerge to attract and keep qualified people in the profession.

For various reasons, a few jurisdictions currently have no significant difficulties with numbers of personnel; for some, the sufficiency has been brought about by layoffs and program changes that have eliminated positions or stretched personnel to cover more students or more roles, or both. The spokesperson from one such jurisdiction said that, for this reason, the state had moved to concern with quality issues, but "we cannot quite reach quality due to budget cuts and policy changes." Still another participant stated that her jurisdiction "is concentrating on qualitative issues of instruction and on making sure that we are serving the right kids. But the undertow of change and fiscal measures may pull us back to preoccupation with numbers of personnel." Finally, in areas where quantity is not a major problem, inservice becomes the overriding concern for improving the quality of instruction; at the same time, federal policy and federal funds are taking quite a different direction, and all but a few states are diminishing, rather than replenishing, budgets for all educational efforts.

The inservice efforts themselves are subverted when they must be aimed, as is necessary in many jurisdictions, partially at recruitment and deployment problems. In this sense, inservice becomes an instrument of quantity as well as quality solutions, and energies are directed toward retraining and recertification at the expense of skill building or technological innovations. And, of course, inservice training itself is being cut back in more than a few jurisdictions. In New Jersey, the widely respected Child Study Teams (which provided inservice to teachers, along with consultation and individualized planning) are being eliminated. In Michigan, curriculum resource consultants (who function as coordinators of inservice training) are being asked to return to the classroom and their functions are being eliminated, and many other trainers are being assigned to other duties. In California, improvements in assessment and in Individualized Education Plans are being set back by budget cuts, while Missouri reports that its Dean's Grants and other personnel preparation projects had made inroads into developing competency statements and program models, "but now they approach paralysis with budget cuts, threatened changes in regulations, and other state and federal reversals." (This sampling of comment is expanded in the next chapter's discussion of the general effects of state and federal budget cuts on the preparation and recruitment of personnel to serve the handicapped.)

Finally, great concern and confusion with changing policy and intentions at the federal level is universally reported. According to one participant, "there is so much concern with federal change

that educators can't take a look at what we are doing. Everyone is hesitant to question it openly in public." According to another, "We have wrestled with quality in district compliance plans. All of them have school-board adopted governing procedures in tune to all of the requirements. They are ready to get at quality, but now they are upside down regarding the federal priorities." Thus, ambiguity at the federal level trickles down to states and districts, as well. The overall economic situation provokes still more uncertainty, and this combination of uncertainties creates a negative influence on quality and equity across all of education.

Preservice Preparation

Many participants in this survey agree that teacher education programs in colleges and universities are doing a better job than they were doing five or six years ago. Many report that the caliber of higher education faculties has improved and that more faculty members have appropriate backgrounds in special education than was the case in the early 1970's. A number of universities and colleges are also reportedly aware of needs for improvement and change and are, accordingly, engaged in processes of self-study and program modification. There is a widespread perception that higher education is expected to provide training to special education trainees in an increasing array of skills and knowledge, and that the continuing addition of new areas into the curriculum crowds out the capacity to train students well in the essentials.

The specific concerns voiced by representatives of the 54 jurisdictions included in this study centered on: the rate at which higher education is able to adapt to the mandates of federal and state authority and to the needs of the local marketplace; trainee experience in group processes, communication, and teaming skills; the adequacy of the practicum experience; and the need for higher education to prepare personnel specifically for service in diverse geographic, cultural, and socioeconomic settings.

Limited Flexibility

The limits and constraints imposed by higher education bureaucracies and state politics are seen as hampering preservice preparation programs in being as responsive and relevant as consumers of their graduates would wish. According to the respondent from Missouri:

"Problems are inherent in the system. The cumbersome procedure required for universities to institutionalize change is usually a four-year cycle. Universities cannot identify the new areas and competencies, obtain different personnel, or change teaching assignments without an elaborate long-term planning process that may take years. By the time they make adjustments and enter a four-year cycle, educators are demanding additional change, and the higher education programs may no longer be relevant. And so the laborious cycle is repeated. There is no direct and rapid way that universities can address new skills required of trainees. Today they are also suffering economic hardships; higher education is not receiving adequate funding for education in general, much less to institute changes in response to certification improvements and other mandates. There is a lack of preparation time and lead time to plan change, and there is a general lack of understanding of the structures and cycles of university programs. Lack of quick response time, combined with the difficulty small colleges and universities have in obtaining and retaining qualified teaching staff; 'academic freedom' and the resulting inconsistency or lack of external quality checks; and the lack of programs to train personnel for low-incidence handicapped populations—all of these further exacerbate the problem.

"In our state, the changes that were required to be in place in local schools in October 1977 did not allow universities a four-year cycle in lead time. Informing higher education of these changes was a slow process. When they were completing the first four-year cycle of the revised program and gearing up to address the appropriateness of their training, already there was talk of changing the regulations for Public Law 94-142. Moreover, certification requirements have changed, and the relevance of course content is being questioned. Teacher educators feel that they are on quicksand."

It was also pointed out by several respondents that higher education faculties often perceive less flexibility than they really have. Similarly, the spokesperson from North Carolina suggested that "if Part D funds were used to purchase validated practices, we would see the institutions of higher education incorporate changes much more rapidly. The present funding practice pays for doing more of the same thing."

In any event, respondents generally believe that higher education does not or cannot respond rapidly enough to changes dictated by federal mandates such as Public Law 94-142; to changes in state statutes and certification requirements; to developments in education; and to the changing personnel demands of the public schools. In addition, whereas some jurisdictions have achieved good communication and collaboration among higher education, state education agencies, local districts, and other educational entities to the extent that training programs have been reorganized and long-term manpower planning is possible, still other jurisdictions report little cooperation and an unwillingness in higher education to share data necessary for manpower planning. In some instances, cooperation is faltering because university programs are now fighting for their existence, and because higher education administration, which once saw teacher education as a bonus for the campus, no longer espouses this view and is, in some cases, de-emphasizing teacher education as a campus program.

Higher education received mixed reviews on its relationship with local districts and schools. Some respondents praised the efforts of faculties to reach out. Others reported a distressing lack of interaction. Still others reported a diminishment of interaction caused by funding cuts that had affected the capacity and motivation of college and university faculty members to maintain involvement with public education.

Where problems of communication and collaboration have moved toward solution, the success has been largely attributable to the strength of the Comprehensive System of Personnel Development in a given jurisdiction. In many states, participatory planning, the development of manpower data systems, the creation of information and dissemination systems, and overall coordination of all personnel preparation activities have opened the lines of communication and brought all interests much closer together. In many places where this sort of success has been achieved on a statewide level, it is now being translated to the local level, as more and more district administrators and personnel are becoming involved in their own personnel development processes and activities. Yet the findings of this survey would indicate that the value of the CSPD concept is only beginning to be recognized in a national sense, and that considerably more awaits accomplishment in this regard if problems of manpower supply and demand are to be solved at any future time.

Processes, Communication, and the IEP

The most repeated concern about preservice preparation voiced by participants in this survey centered on a set of related issues that more or less cluster around the Individualized Education Plan. Higher education reportedly exhibits great variation in its approach to training in the IEP. Where deficiencies exist, a central problem cited is that teacher trainees are taught to write the IEP by themselves, but not taught how to participate in the group processes necessary to its development and implementation. School districts find that new teachers are not asking the right questions in the IEP meeting and have not learned to integrate multidisciplinary information into educational planning. It is of concern to more than half of the respondents that new personnel are not well trained in the IEP process or in teamwork in general. One participant stated that "universities do not model the multidisciplinary approach. Disciplines are trained in their segregated colleges or departments and usually have no interaction prior to employment in the local school district."

To a lesser extent, problems with the IEP are also traced to insufficient mastery of fundamental skills by trainees. As was reported by the spokesperson from Maine:

> "Monitoring always shows a weakness in getting summaries of evaluative data into IEP's. Everyone doing an assessment must also submit a written summary with recommendations for the IEP. This is true for special educators and other professionals. Some are writing the report. Others are not using all available information to develop the IEP.
>
> "Higher education and new trainees show a lack of familiarity with legal and procedural matters, and little is being done in meaningful parent involvement. All in all, this represents problems in processing, group cooperation, communication, and the whole issue of interdisciplinary sharing of information.
>
> "Across emotional disturbance, learning disabilities, and mental retardation, people don't have sufficient background in the basic three R's. While special education trainees have much of the same coursework as regular education trainees, people anticipate vastly different roles and are prepared for separate, rather than collaborative, roles. Training is heavy on assessment and light on programming.

> "Most teachers serve in regular programs, where they are not given enough time to do all that is expected. But they are weak on consulting skills and don't know how to assist regular classroom teachers."

Similar concerns were expressed by the majority of respondents, who believe that special education trainees need much more preparation in working with others, and less expectation of working in isolation. Specifically, they are seen as needing more training and experience in working as members of an interdisciplinary team, in working with parents, in serving as mediators and advocates, in functioning in inter-agency cooperation, in consulting and group process skills, and in fundamental skills of communication and collaboration with others for the benefit of children's education.

Practical Experience

Some of the difficulties perceived in relation to the IEP and group processes in general could be ameliorated if trainees received still more practical public school experience during preservice preparation. New teachers in many jurisdictions are thought to lack practical experience and to need further supervision and assistance in dealing with children, as well as in planning and organizing the classroom. To the extent that the higher education program is viewed as "too much like the dissemination of information," it is believed that new teachers are often unable to integrate the theory they have learned with the practical realities of the classroom once they are on their own. The severest criticism of the respondents in this regard was reserved for graduate programs which grant credentials without requiring students to complete any hands-on experience with children.

To the extent that trainees need more classroom experience during preservice preparation, both state departments of education and higher education are moving toward solutions in a number of jurisdictions. In some, full certification is dependent upon successful completion of a supervised and supported first year of teaching, or a transition year of intensive on-the-job training after preservice training and before full-fledged admission into the profession. In other cases, universities have mounted five-year preparation programs for special education training, in which the number, length, and varieties of practical experience are expanded.

Lack of Precision with Low-Incidence Populations

There appears to be a general concern that people trained to serve severely retarded, multiply handicapped, severely

emotionally disturbed, and sensorially handicapped pupils need broader and more precise skills than they receive in some preservice preparation programs. This criticism does not encompass training programs which specialize in preparing personnel for these populations but, rather, those programs whose cross-categorical or noncategorical natures makes them, of necessity, more generic than specialized. Such programs generally have a "track" intended as preparation for working with children who are severely handicapped. Thus, graduates come out of a program in mental retardation, for instance, with good skills for teaching mildly to moderately retarded students, but very weak skills in severe retardation, which they will nonetheless be certified to teach and for which they will be in demand.

In many jurisdictions, certification requirements do not delineate mild, moderate, or severe handicaps. Consequently, higher education is responding to certification regulations in this generic approach to preparing personnel in severe handicaps. In this sense, the concern expressed in this survey is not poor training, as such, but a potentially structurally unsound basis for preparing personnel for low-incidence populations. This basis has grown from the effort to certify personnel for flexible assignments in a segment of special education where manpower shortages are prevalent and the incidence of eligible children in a given district may be very small. In almost every case, state and local education agencies move in with on-the-job training for new personnel. While the combination of preservice preparation on a "severe track" and intensive inservice attempts to solve this problem, most respondents continue to question the wisdom of such an emergency approach.

Preparation of Personnel for Specific Geographic and Socioeconomic Service

Representatives of jurisdictions which report serious personnel needs in rural or inner city areas urged that colleges and universities take into account the unique training that is necessary to prepare personnel for the professional and social realities of service in such settings. The prevailing opinion is that teacher educators in higher education should work with districts in their service areas to tailor personnel preparation (particularly the practical experiences to the conditions and contexts of districts which need to hire their graduates. Specifically, higher education is asked to be more in touch with the educational, cultural, and socioeconomic realities of rural, remote, inner city,

and multicultural settings which seek to hire special education graduates, and, through closer cooperation, work to develop training curricula and practical experiences that will prepare trainees for these service settings and to improve recruitment and retention of special educators in the districts themselves.

Several respondents also expressed the need for higher education to assist in the retraining of underqualified people in rural and inner city districts, and to address with training the problems of high attrition in such settings. To create productive and motivating training experiences in these settings will necessitate collaboration and mutual effort between teacher educators and the communities involved to design individualized training and practical experiences.

Other Concerns

Additional comments about the quality of preservice preparation were more random and less concentrated than those already reported. Chief among these is criticism of special education training programs that are staffed with only one or two faculty members whose energies and expertise cannot be stretched across the demands of the training situation. This concern is accelerating as budget cuts threaten to reduce manpower in higher education. A related problem is the entry of some colleges and universities into multicategorical training without a corresponding increase in the numbers or expertise of their faculty members. In such situations, people who have been doing a good job with training in one specialty are now training in three or four specialties without the opportunity to expand their knowledge and competence, and without change in the number or level of field placements to which trainees are assigned for practical experience.

Discussion

The profession of special education supports the concept that the best education for handicapped students is in the least restrictive environment suitable for the learning and social characteristics of each. In endorsing this concept, special education also endorses its implications for normalization, for greater social and vocational opportunities, and for a society that accepts and honors individual differences.

For many handicapped students, the least restrictive and most desirable environment is that of the regular classroom for either all or part of the school day. The benefits that can accrue when

children are appropriately placed with skilled classroom teachers and support personnel have been demonstrated in practice and documented in the professional literature. In the years immediately following the enactment of Public Law 94-142, this concept was supported by a federal priority and with federal funds for such projects as Dean's Grants (to begin the infusion of the principles of instruction for the handicapped into the preservice preparation of all educators), the National Support System Project (which reinforced the work of all Dean's Grants), regular education inservice projects (to initiate inservice training on education of the handicapped in school districts), the National Inservice Network (which assisted the regular education inservice projects), and other efforts. Since 1981, however, as state and federal funds have diminished, the federal stimulus and funding support for this concept have also declined. The Dean's Grant program still operates, but with greatly curtailed funding. Regular education inservice is no longer a federal priority, and both the National Support System Project and the National Inservice Network have lost all federal funding and have passed out of existence.

It is, therefore, an extreme irony that the movement toward this least restrictive of all educational environments is now accelerating in special education. It is an even greater irony that it is taking place, in great part, from necessity, rather than purely for reasons of educational philosophy. It appears that regular education for handicapped students is expanding, not because fiscal backing and federal authority continue to promote it, but precisely because financial problems in many locations prompt the need to provide education in the least expensive environment.

Chapter 4 showed a trend in many jurisdictions to move handicapped students ever closer to regular education, and information in Chapter 5 verifies this trend by pointing up a major emphasis on inservice training for regular educators in providing education for handicapped students in the mainstream. While regular educators in massive numbers need inservice training in order to succeed in including handicapped children in their programs, state dollars for this purpose continue to dwindle. Further, in response to real and threatened budget cuts, the federal grant program for personnel preparation has, since 1981, veered sharply away from the preparation of regular educators for classroom instruction of the handicapped. Therefore, as fiscal exigencies are thrusting larger numbers of handicapped students into regular education, federal dollars and priorities are going in quite different directions. These influences may thrust handicapped

students further from specialized instruction unless their regular classroom teachers can be prepared appropriately and unless the other resources and supports necessary for their education can also be supplied.

This survey has also shown considerable juxtaposition of effort among the various providers and policy makers involved in personnel preparation—without showing the same consistency of collaboration. Take, for instance, the entire issue of supply of and demand for personnel. Difficulties persist in some jurisdictions in the matter of obtaining basic data, while certification policies and administrative hiring practices in response to recruitment problems not only obscure the true dimensions of need but also dilute the quality of instruction. Jurisdictional progress with the Comprehensive System of Personnel Development is financially threatened, and the Cooperative Manpower Project for Special Education (designed to assist states with manpower planning) has only resumed service recently after a 15-month hiatus caused by the withdrawal of federal support. Both higher education and inservice providers are engaged in the retraining of personnel to assume new roles or become fully certified for jobs they already have, and the federal Part D grant program can be only minimally supportive in the solution of any of these manpower problems. Meanwhile, certain legislatures and other administrative bodies are redefining eligibility of handicapped children for services.

Another case in point is comprised of the issues surrounding preparation of personnel for instruction of children with low-incidence handicaps. Here, the certification policies of many jurisdictions create a context in which personnel may teach such students with minimal preparation to do so. Districts with recruitment and deployment problems often support the flexibility of such a plan, as do the policies of certain state boards of education. At the same time, teachers find themselves unable to meet the instructional needs of severely handicapped students, and parents and the public become disillusioned. Colleges and universities, slow to change and encumbered by faculty losses, are given no particular mandate to change the "severe tracks" of their training programs, and inservice rushes in to attempt to correct the situation. Everyone is involved in the problem, but everyone is not going in the same direction.

The concern about widespread weaknesses among educational personnel in communication, collegial consultation, teamwork, interdisciplinary processes, and related skills underscores the tragedy of the professional isolation that separates the

interests that should be able to work together to solve such problems as those identified in this survey. "In the midst of our anonymous technology and our separate processes, we are going in and out of our separate doors. . . . While we should be moving ever closer toward the child, there is an unfortunate progression of all of these forces away from the child. This progression exists in time and space and in our heads and on our desks—even as we work in behalf of children. The further we are removed, the greater the danger that we are working for some sort of intellectual or political or administrative abstraction, instead of working for children."

State education agencies, local districts, colleges, universities, certification bureaus, legislatures, boards of education, and other interests are all involved in issues of quantity, quality, and equity in special education. Each of these forces interacts in the educational enterprise. When each operates on an agenda that has more to do with survival and maintenance than with excellence and progress, then none can fulfill its responsibilities to children. No greater service might, therefore, be rendered than a more clear delineation of:

- School districts' accountability for appropriate teaching and learning conditions, including the qualifications of instructional personnel who are hired;
- Colleges' and universities' accountability for admitting and graduating competent personnel;
- Certification agencies' accountability for the consequences of policies for admitting personnel into instructional positions;
- Teachers' accountability for the direct instruction of students;
- Related services' accountability for therapeutic interventions;
- The community's accountability for supporting education and becoming involved in the improvement of education;
- State education agencies' accountability for providing leadership, coordination, and evaluative monitoring;
- State boards' and other policy makers' accountability for policies that affect the supply of qualified personnel; and
- Legislatures' accountability for strengthening the quality of education and ensuring equity of educational opportunity.
- The accountability of all of these interests in working as a real team, in acknowledging problems and obstacles where they do exist, and in seeking solutions in ways that do not further obliterate a common understanding of the true conditions surrounding the education of the handicapped in local districts, states, territories, colleges, universities, and the nation at large.

> A rededication to the purposes of education is required of us all. School boards and administrators need to set teachers free to be teachers, not bureaucrats and cops. Teachers need to ask more of their pupils, and their unions need to devote less time and energy to politics and more to the quality of life in the classroom. The universities need to demand more of elementary and secondary schools. Parents need to demand more of the education system, but also more of themselves as supervisors of their children and as taxpayers. Legislators need to vote the revenues to make education better and reform existing education establishments. Corporations, newspapers, and civic leaders have to make educational quality a major focus of their time. Presidents need to give education more than just words, and would-be Presidents more than just promises. (More than money, 1983, 7)

If real and lasting improvements are to occur, we should perhaps approach change in a manner different from that of the past eight years. We should perhaps distinguish more carefully between the relatively easy process of being creative in the abstract and the infinitely more difficult process of bringing about change in the concrete (Levitt, 1972). Although Public Law 94-142 mandated a wave of potential changes for education, many of these changes have not been genuinely nor fundamentally accomplished. Most of our change efforts have been based on authority and mandates, and few have grown from the processes of planned change. In the rush to comply, to show that change was at hand, we have been far more product-oriented than process-aware. Products and discrete events do not, however, guarantee change. Rather, the essential elements involved in change (Rogers, 1962) are:

- Communication: The transfer of ideas, plans, enabling procedures;
- The social system: The group of individuals who are functionally differentiated but engaged in collective problem-solving around a common goal; and
- Time: The temporal route from awareness of the innovation, to the arousal of interest, to evaluation of the idea, to actual trial, to adoption, to implementation, to institutionalization of the change.

Genuine improvement takes time and consistency of effort and an agenda that plans for various changes to be sequenced, related, built one upon the other, and mutually achieved. Time,

consistency, and long-term agendas appear to be in short supply with regard to implementing education for all handicapped children. Many valuable programs and projects have been discarded long before their impact could become manifest in educational practice, and new ones have replaced them for three-year cycles. National policies shift rapidly, and today's new federal priority cancels out yesterday's local plans. We proceed along dimensions of four-year university time lags, three-year projects, four-year government administrations, one-year budgets, intermittent reversals and changes in course, and arbitrary allocation and withdrawal of funding. All the while, the twelve-year educational careers of students are affected in the process. From this perspective, many changes apparently do occur—not all of them good.

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Chapter 6

Mandates, Money, and the Supply of Personnel

A broad view of the fiscal situation of each of the 54 jurisdictions covered in this survey appears in Chapter 2. This chapter examines more closely the effects of state budgetary actions on preservice and inservice training of personnel for education of the handicapped and also explores the influence of state and federal law on personnel preparation. The purposes of the chapter are:

- To summarize respondents' estimates of the effects of local, state, and federal fiscal policy on the present and future supply of and demand for personnel to educate handicapped children and youth;
- To determine the extent to which state and territorial law supports personnel development for special education; and
- To present respondents' descriptions of the impact of Public Law 94-142 on education for the handicapped and on the preparation of personnel for special education.

Finances

All jurisdictions reported in this study receive federal Part B funds to be applied directly to educational services for handicapped children (except for New Mexico, which has elected to provide education for the handicapped apart from Public Law 94-142). These funds are allocated to jurisdictions on the approval of their State Plans by the Special Education Programs, Office of Special Education and Rehabilitative Services, U.S. Department of Education. These allocations are sometimes referred to as "flow-through" funds because they flow from the state department of education to local districts for program implementation.

State education agencies, local education agencies, colleges, universities, and non-profit organizations are also eligible to apply for federal Part D (personnel preparation) funds by submitting an application to the discretionary grant program administered by the Division of Personnel Preparation of the Special Education Programs office. For fiscal 1981, this discretionary program was funded by Congress at approximately $58 million. At that time, the Division of Personnel Preparation

administered grant awards (most for three-year periods) in such a manner that only one-third of the states or territories applicants became eligible to apply for new three-year projects every third year. For example, in the spring of 1981, projects within 18 states and some territories were in the first year of their three-year cycles (the X states); projects within 18 others were in the second year of their three-year cycles (the Y states); and projects within the remaining 18 were in the final year of their cycles (the Z states) and were therefore eligible (if their applications were approved) for new grant projects as of June first.

Early in 1981, however, the Administration announced a recision (a withdrawal of funds already committed for the fiscal year) that reduced the Division of Personnel Preparation's budget to approximately $34 million (or about two-thirds of what had originally been allocated for that fiscal year). Since two-thirds of its grant awards had already been committed to ongoing projects that were in the first or second year of operation, the recision appeared at first blush to mean that no new personnel preparation grants could be awarded in 1981. It soon became apparent, however, that such a change would create great inequities among the states and territories, inasmuch as two-thirds of them would have personnel projects funded by the federal government in the much needed area of handicapped education, but that one-third of them—pending applications for new projects from the Z states—would have none. In order that these states not suffer inequitably from the recision, it was decided that new projects would indeed be funded for 1981, but that both new and continuing projects would be reduced in funding by 48.5 percent, across the boards. For X and Y states, whose projects were entering the second and third years of work, this meant a drastic and unexpected reduction in funds for ongoing training of personnel. For newly funded projects, it meant dramatic curtailments in planned activities. For all, it meant a revision downward of the scope of planned work, and for all it also meant an interruption in receipt of federal funds for several months during the summer of 1981 while deliberations were in progress on solutions to the problems presented by the recision. For most, it also meant the dismissal of personnel because of reduced project budgets, and for some it meant the end of project work. Later in the fiscal year, the Congress voted a supplement to the Handicapped Personnel Preparation Program, and the Division of Personnel Preparation was able to restore approximately 30 percent of lost funds to all of its projects. When this relief came, however, it came too late to recover some of the damages suffered by personnel preparation

across the country. Accompanying these fiscal fluctuations were changes in the federal priorities for funding in personnel preparation.

For the fiscal year that will begin on June 1, 1984, the House and Senate appropriations bill assigns $55,540,000 for the Handicapped Personnel Preparation Program, but the bill had not (as of this writing in October 1983) gone forward for the President's approval. Of whatever amount is finally allocated for 1984, approximately two-thirds is committed to continuing projects that will be in their second or third years as of June 1984; the remaining one-third can be applied to new projects that will commence on that date.

The notice of the new application deadline for projects to commence in June 1984 was announced in the *Federal Register* on October 3, 1983. Descriptions of its priorities are abridged as follows:

1. *Preparation of Special Educators (new projects):* The Special Educators priority supports projects designed to provide training for personnel engaged or preparing to engage in employment as special educators of handicapped children or as supervisors of such educators. This priority includes the preparation of early childhood specialists, special educators of the handicapped, special administrators and supervisors, speech-language pathologists, audiologists, physical educators, and vocational educators. Awards will be made for *preservice training only . . . . About 50 percent* of the funds made available for new training personnel for the education of the handicapped awards for fiscal year 1984 will be made available for this priority. *The average award is expected to be about $50,000.*

2. *Preparation of Leadership Personnel (new projects):* The Leadership Personnel priority supports doctoral and postdoctoral preparation of professional personnel to conduct training of teacher trainers, researchers, administrators, and other specialists. *Awards will be made for preservice training only . . . . About 17 percent* of the funds made available for new training personnel for the education of the handicapped for fiscal year 1984 will be made available for this priority. *The average award is expected to be about $79,000.*

3. *Preparation of Related Services Personnel (new projects):* The Related Services Personnel priority supports the preparation of individuals who provide developmental, corrective, and other supportive services as may be required to assist a handicapped child to benefit from special education. This priority supports the preparation of paraprofessional personnel, career educators,

recreation specialists, health services personnel, school psychologists, social service providers, physical therapists, occupational therapists, and other related services personnel. Awards will be made available for *preservice training only. About eight percent* of the funds made available for new training personnel for the education of the handicapped awards for fiscal 1984 will be made available for this priority. *The average grant is expected to be about $40,000.*

4. *State Educational Agency Programming (new projects):* The State Educational Agency Programming priority supports projects dealing with unique statewide training in all or several of the need areas identified by the Comprehensive System of Personnel Development (CSPD), and may include training in management and organizational design which enhances the ability of states to provide comprehensive services to handicapped children. Only state educational agencies are eligible to submit applications under this priority. Awards will be made for *preservice and/or inservice training. About eight percent* of the funds made available for new training personnel for the education of the handicapped awards for fiscal year 1984 will be made available for this priority. *The average award is expected to be about $80,000.*

5. *Special Projects (new projects):* The Special Projects priority supports the development, evaluation, and distribution of imaginative or innovative approaches to personnel preparation, and includes development of materials to prepare personnel to educate handicapped children. Awards will be made for *preservice and/or inservice activities. About five percent* of the funds made available for new training personnel for the education of the handicapped awards for fiscal year 1984 will be made available for the priority. *The average grant is expected to be about $77,500.*

6. *Specialized Training of Regular Educators (new projects):* The Specialized Training of Regular Educators priority supports projects that provide deans or equivalent administrators from institutions of higher education or local educational agency officials the skills necessary to promote development of regular classroom teachers, administrators, and supervisors. The purpose is to provide quality education to handicapped children who receive part of their education in regular classes. *About five percent* of the funds made available for new training personnel for the education of the handicapped awards for fiscal year 1984 will be made available for this priority. *The average award is expected to be about $40,000.*

7. *Preparation of Trainers of Volunteers, Including Parents (new projects):* This priority supports the preparation of trainers of volunteers, including parents, to assist in the provision of

educational services to handicapped students. In addition to the preparation of volunteers and parents by experienced professionals, this priority may support projects which emphasize the training of parents by parents. *About seven percent* of the funds made available for new training personnel for the education of the handicapped awards for fiscal year 1984 will be made available for this priority. *The average award is expected to be about $50,000.*

. . . . . .

Each jurisdiction has been affected by changes in the federal grant program and by the events of the spring and summer of 1981. Each has also been affected by the diminishment of the inservice priority at the federal level. Inasmuch as the Handicapped Personnel Preparation Program now places reduced emphasis on inservice either for regular educators or special educators, it has been suggested that jurisdictions divert small percentages of their Part B (implementation) funds to supplement the lost federal funding for personnel development. Some jurisdictions, however, cannot afford to sacrifice the implementation funds. Some also report very scarce funds from other sources to support inservice training. It is to all of these contingencies that the following commentaries refer.

Alabama

Alabama has little state money for the provision of inservice education, and in 1982 further state cutbacks were anticipated (following a 10 to 15 percent proration of special education funds, cut from budgets school districts had been allocated for the school year). The reduction in federal Part D funds cut into parts of the state's inservice programs, such as vocational education for the handicapped and training for teachers of the multiply handicapped. Cuts in federal training dollars have also limited personnel preparation at the preservice level.

Alaska

Special educators in Alaska are beginning to experience a tightening of the flow of state money to the schools. Because 21 of Alaska's 52 school districts are classified as state-operated schools under Public Law 89-313, reductions in 89-313 funds would have damaging effects, particularly on rural areas. One consequence would probably be a change in student:teacher ratios. Losses of 89-313 funds would also damage inservice training in special education and would eliminate the use of most teacher's aides in remote areas. A reduction in funds for Public Law 94-142 would severely interfere with other inservice programs in Alaska,

and, because of the state's distances and related travel costs, technical assistance and monitoring of local special education would be seriously reduced if Part B administrative dollars diminished.

Arizona

Cuts in federal Part D funds were targeted on the statewide SELECT inservice project (which has been replicated in numerous locations outside of Arizona). A grant program at the University of Arizona for preparation of special education has also been cut back.

Arkansas

Arkansas is heavily dependent on higher education for its inservice training in special education. Higher education, in turn, is heavily dependent on federal Part D funds for this purpose. The shift in federal priorities away from inservice is having a deleterious effect. Inasmuch as faculty salaries are low and small budget and salary increases have cost faculty members up to 22 percent in purchasing power, even the most committed teacher educators are finding it more and more difficult to pay for gasoline and other travel costs involved in providing inservice gratis. "The only hope for quality is the (federal) Division of Personnel Preparation funds. We are caught between a pullback in federal and state funds and are not able to fill the gap. We were not in good shape before, and now we are getting further and further behind."

Bureau of Indian Affairs

The BIA is in its third year of a base support program, with "add-on" funds for the implementation of its special education programs. Its base funding has not increased at all over these three years, and funding has decreased for the Office of Indian Programs as a whole. The BIA budget has been cut, with no disruption of services for handicapped Indian children. Although the FTE's for the Bureau of Indian Affairs as a whole have been reduced, Exceptional Education FTE's have remained the same. However, it is difficult to recruit qualified special education teachers and related services staff, often because of the geographic location and periodic system-wide freezes.

California

In California, personnel development funds come from local districts and some university grants, but mainly from the federal Part D and B funds, plus a small amount of state money. If,

as the result of federal changes (such as a block grant for Public Law 94-142), the 94-142 money begins to flow through the state directly to the districts, this would destroy the entire program of personnel development in California, considering the state's budget deficits. The state education agency has a plan in progress to locate resource service centers on university campuses, in order to stimulate mutual access and cooperation between inservice and preservice personnel and resources. Denial of federal Part D funds for this purpose would alter the whole concept of the inservice-preservice relationship that is being built and would demolish the program.

Colorado

The state education agency's Part D grant program was hurt by cuts at the federal level. "The direct impact may not seem tremendous, but it is a big impact when you cannot afford to keep a full-time staff development person at the state level. This position is being filled on a part-time basis now; other state personnel are also losing pieces of their jobs." Higher education is laying off faculty members, with particularly high numbers being reduced at the University of Colorado. Some of these reductions are consequences of positions which had to be eliminated in the wake of reductions in federal Part D funds. Part B funds are the primary source of support for inservice programs at both the state and local levels. Out of necessity, as support to direct services for handicapped children grows, the availability of these dollars for inservice will decline.

Connecticut

The federal Part D training dollars are essential for inservice. As Part D funds have declined, Connecticut has had to reduce inservice institutes it operates from 26 to 11, and to reduce the number of participants served, because of inability to compensate for travel and general expenses. Part B funds are used to fill in some of the gaps left by the reduction in Part D, and to respond to local requests for assistance.

Delaware

There is no state money for inservice; instead, the state depends on Part D, Part B, and Regional Resource Center funds, and it has been necessary to cut back on the inservice supported by Part D federal training funds. Delaware State University's preschool/early childhood personnel preparation grant program had to be cut back because of the reduction in

federal training funds. Although the university people want to add a person to the small staff of this program, they would, instead, lose a person if they had no Part D money.

District of Columbia

The change in the federal Part D funding and priorities is changing the focus of personnel development in the District of Columbia. Whereas the District heretofore used the Part D money for the direct training of special education teachers and other personnel, reductions have made it possible only to train trainers with these funds. Regular budget funds from the District of Columbia Public Schools support additional courses, media demonstrations, and other activities.

Florida

Statewide training formerly funded by the federal Part D program is gone. The federal funds had been used to support teams of trainers from each district, as well as from the state's Learning Resource System. Moreover, preservice training of speech correction personnel at Florida's oldest program in this area was disrupted when federal funds were cut off.

Georgia

Georgia has been using Part D funds, through its Comprehensive System of Personnel Development, to provide tuition grants for upgrading provisionally certified teachers toward full certification. Although this was and is a critical need, the loss of federal Part D money has halted this effort. At Georgia State University, it has become difficult to recruit students because they have lost their financial incentives as a result of federal budget cut. This loss is particularly hurting the advanced preparation program.

Guam

One-third of the total special education program on Guam is supported by federal funds, and any reduction would be disastrous. Federal Part D funds have been used for the last several years to conduct series of workshops, seminars, and one-credit courses. The reduction in Part D funds has not yet hurt this program, which is being supplemented by funds from Part B. Since there is no local money for inservice, the use of Part B dollars for this purpose will probably increase.

Hawaii

Hawaii is organized as a single statewide school district. There is no local funding for education. Federal budget cuts

would hit hardest on supportive services, which would undoubtedly be reduced.

Idaho

Institutions of higher education suffered a severe rollback in allocation of state funds in 1982, across the boards in all college and university programs. Many faculty positions are expected to be lost, and special education becomes vulnerable when this action is combined with further federal cuts in Part D funds. Higher education has had to pull back on its inservice outreach activities to districts because of serious limitations on travel funds. The cuts in Part D funds has also forced state and local education agencies to dip more and more into Part B for training of personnel.

Illinois

There are limited state and federal discretionary funds for inservice for special education personnel in Illinois. Some states use Part B funds for inservice, but this cannot be done in Illinois, as Part B dollars are committed to programs and services for children, and no more than $25,000 remains for all other purposes.

The Illinois State Board of Education's CSPD requires that local districts applying for 94-142 flow-through funds spend 5 percent of the funds for staff development and inservice. Part D funds are critical and necessary for successful implementation of the Illinois Comprehensive System of Personnel Development. During the past six years, these dollars have been used to support the design, dissemination, and replication of high-need training which has statewide impact (for example, teacher assistance teams, mediation and conflict resolution, training for staff development coordinators and behavior disorders specialists). Cutbacks in Part D funds have affected, and continue to affect the amount of training and the state's ability to provide a leadership role in dissemination of exemplary training models.

In order to train local district personnel in staff development processes, the state formerly provided intensive training in adult education skills, but this program had to be eliminated when the Part D grant was cut. Inservice training in mediation training was significantly cut back because of the loss of a portion of federal funding in 1981 (although the federal regulations changes proposed in the summer of 1982 would have made it necessary to have mediation procedures in place prior to due process actions). Finally, the state's only inservice program for teachers of

sensorially handicapped, orthopedically handicapped, and low-incidence populations was completely eliminated due to the reductions in Part D funds.

Indiana

Since the state education agency's Part D grant application was turned down three years ago, the state has not had any federal funding for inservice, other than Part B funds. Indiana's universities have lost nearly half of their federal funds.

Iowa

Losses of federal Part D funds in higher education have been felt in losses of student assistantships; some faculty positions are not being filled, and cuts have necessitated some reorganization at the university level. But, all in all, reductions in Part D funds have more immediate effect on inservice than on preservice teacher education. The state has lost its two-week inservice project in autism, and its institutes in specific areas (e.g., vision, mental disabilities) have been reduced. Iowa is doing some inservice with Part B set-aside funds and district flow-through monies, but, without Part D funds, inservice training might be extinguished, particularly training of small groups, such as administrators.

Kansas

Kansas has not received any federal Part D money for two years. This money had previously been used to fund inservice in low-incidence areas. While Kansas has been using Part B money for special projects for many years, these projects do not specify inservice, and none of the Part B flow-through money is earmarked for inservice training in special education. Reductions in state travel budgets have impeded the capacity to meet every local inservice request, and there is more emphasis on planned local training.

Kentucky

The federal Part D cuts have made it even more difficult to protect the low-incidence handicapped populations, particularly in preservice preparation, even at the graduate level. This area is the least defensible because its higher education faculty:student ratios are low. Given the overall fiscal uncertainty, higher education is less prone to hire in specialized areas in tenure track positions.

Louisiana

The effects of cuts in the federal Part D grant program have not been felt yet in Louisiana, which has used state funds for professional development. Louisiana offers considerable tuition-free higher education as a recruitment incentive in its efforts to overcome a serious shortage of special education personnel.

Maine

If the federal Part D grant program were disabled, this would have a significant impact on Maine. Preservice training in severe handicaps depends on federal funding, and it is not clear that the master's program for resource room specialists at the University of Maine-Orono could continue without Part D support. The University of Maine-Farmington is endeavoring to supplement the Part D funds it has lost, but the quality of its program is threatened by the loss. Further losses in Part D funding would also exacerbate the shortage of speech/language personnel, as the number of new graduates would probably decline to no more than two or three per year. The speech program at Orono has already suffered from the Part D fluctuations, and the state has had to use some Part B funds to stimulate and continue this preservice program. The state education agency receives a very small amount of Part D money, which pays only for the CSPD coordinator's position. The Part D cut reduced the extent to which state people can be involved in inservice. If Maine had more of these funds, state personnel would be doing more with pupil evaluation, team management, and parental involvement, and would also be recruiting inservice participants in the active manner that prevailed prior to losses of federal funds.

Maryland

Maryland's Comprehensive System of Personnel Development was organized with Part D federal funds, but there are not many of these dollars now. Part D is also used for contracts with rural colleges for provision of inservice and for development of training modules and materials, but Part B money, along with other money, has to supplement the training funds.

Massachusetts

In addition to the reduction in Part D funds, Massachusetts has experienced severe rollbacks in state and local funds as a result of the passage of Proposition 2½. Losses of Part D training funds have been offset thus far by the application of Part B funds to inservice programs.

Michigan

The Michigan state department of education has not received any federal Part D funds for the past two years. Special education programs operate on local millage, state funds, and federal Part B dollars. In the past three years, there has been a legislative requirement for personnel development money based on numbers of staff members. For 1982-83, however, the legislature did not approve this allocation, and the state is endeavoring to apply other funds for this purpose. Cuts in the federal Part D grant program have had definite effects on preservice training at the University of Michigan, but it is too soon to predict the impact on the supply of new personnel.

Minnesota

Minnesota was a "Z state." This means it was part of the federal Division of Personnel Preparation's former grant cycle, which made it vulnerable to the delayed funding that occurred over the summer of 1981 while Congress deliberated on the Reagan budget proposal that recommended no new funding to inservice and preservice training projects in states scheduled to begin a new three-year grant cycle at that time (the Z cycle). The majority of Minnesota's Part D programs were either completely lost at that time, or had to revert to one-person staffing. The state education agency helped these preservice programs with discretionary money until they could graduate the students they had when the funds were interrupted, but that is the extent of the rescue that has been possible. Whereas the state has a new certification in early childhood special education, the Part D project had to be cut because of the funding reduction, and this has presented a real problem. The university project to train personnel to serve autistic children has also lost its federal training funds.

Mississippi

The state's inservice resources include technical assistance from the Learning Resource System, whose eight centers are responsible for evaluation, testing, consultation, and training. Two additional centers were eliminated in 1982 because of budget cuts. Along with their other duties, all special education staff members provide inservice. Over 115 workshops dealing with 4,173 people were provided during 1981-1982.

Missouri

Inservice and preservice preparation have been affected by the decline in federal Part D funding. Dean's Grants and other

federally funded projects had made inroads into program development and competency identification, but now they approach paralysis with budget cuts, regulations changes, and threats to the law itself. Federal and state funding losses are affecting higher education's ability to maintain existing personnel preparation programs, and there is little possibility of developing new ones to meet critical personnel shortages.

Montana

The federal cuts in Part D training funds have limited the extent of training across the state, although some Part B funds are being used to ensure that training in local districts will be supplemented by the state.

Nebraska

Although there is a need for schools to be responsible for more of their own inservice, this item has never been uppermost on their agendas and is now even less of an emphasis because of local, state, and federal budget cuts. Staff development is becoming more and more crucial in light of the budget cuts, because reduced funding pushes more handicapped children into regular classrooms and puts more responsibility on the regular educator. The need for inservice training is greater than ever but the financial support from all sources is becoming less, as direct service dollars become the critical need.

Nevada

Federal cuts in personnel preparation funds have hurt special education programs at both state universities (in Las Vegas and Reno), and the state cannot supplement the losses of Part D funds. The cutbacks have been particularly problematic in speech, an area of severe personnel shortage for Nevada. Inservice in special education has been paid for either by Part D funds or by 94-142 state set-aside funds. The cut in Part D funds has hurt the state; many summer workshops were lost, summer training in speech and low-incidence handicaps has been cut, and a state staff training coordinator position was eliminated. The delay in federal training funds that occurred in the summer of 1981 demolished the state's program of regular education inservice summer training.

New Hampshire

All inservice money comes from local school budgets. Currently, no state funds are available for inservice, although the

State Board of Education has recommended building training money into the state budget. Cuts in the federal Part D program and increasing fiscal restraints on the state college and university system will inhibit the development of much-needed new programs. Currently, a limited portion of the state's discretionary Part D funds is allocated for inservice programs.

New Jersey

New Jersey's sources of training funds are Public Law 94-142 administrative money, funds from the Regional Resource Center at Syracuse University, and Part D federal funds. The Regional Resource Center funds have been diminishing at the federal level. The cut in Part D resulted in a dramatic reduction in technical assistance to local districts.

New Mexico

New Mexico has elected to provide education for the handicapped apart from Public Law 94-142 and has, thus, not received any federal Part B funds. Higher education in New Mexico has, however, been eligible to apply for Part D funds. There has been some decline in preservice enrollment because of cuts in university faculties brought about by budget reversals, and higher education is therefore becoming more limited in its capacities to perform outreach services to provide inservice education.

New York

The state education agency has had little federal Part D money in recent years for inservice, but has started new federal projects in speech, hearing and vision training (1982) and in training for Board of Education members (1983). The state's training money comes primarily from discretionary and administrative Part B funds. Officials expect to start witnessing the damage to higher education stemming from Part D fluctuations in 1983.

North Carolina

North Carolina lost 50 percent of its state funds for the training of all educators in 1982. "Vast staff development needs have shifted the emphasis from preservice to inservice, but the federal Part D program has not been attending to such needs." Moreover, cuts in the Part D training grant program will probably liquidate some higher education training projects and severely limit the state's ability to address the development of quality of personnel through inservice. North Carolina's Learning Disabilities Demonstration Centers, which prepared certified teachers

to meet shortages in learning disabilities and related areas, have been entirely phased out due to state budget cuts, and the CSPD coordinator is working with building-based teams to replace this capacity. The Regional Support System is vulnerable to federal and state budget cuts. These eight regional centers serve as training and resource centers to districts. They have lost one person from each three-person staff.

North Dakota

North Dakota has no state funds for professional development. Part D federal funds have been used to support the statewide Comprehensive System of Personnel Development and a local district inservice program. Federal cuts have reduced both by 70 percent.

Ohio

Federal Part D training funds have been reduced by 50 to 60 percent, and the first federal reductions cut off Ohio's ability to send people into the field to train special education personnel. The Personnel Development Task Force is now funded with Part B dollars. Regional Resource Centers and information programs have been badly hurt by federal cuts, and, while preservice preparation programs continue to receive state financial support, there has been massive damage to those funded by the federal government. Officials expect, first, an immediate downward adjustment in these training programs and then a gradual decline in quality, with the result being a less qualified graduate three to five years from now. There have also been higher education cutbacks in general education preparation, and statewide technical assistance has been reduced, as have the preschool incentive grant projects.

Oklahoma

Although more and more of Oklahoma's handicapped children are being moved into regular education, the regular teachers need a great deal of training to become qualified to teach them. The state's application for federal Part D training funds for regular education inservice was turned down. It is expected that "this budget cut situation will 'de-handicap' many kids."

Oregon

Oregon previously used Part D federal funds for regular education inservice, but these projects were cut when funding was reduced. Part B funds are being used to train parents,

school board members, and others. Staff reduction has been occurring from the state to the district level, and 34 people had to leave the state education agency in 1982 because of state fiscal cutbacks. One overall anticipated effect will be greater difficulty in assuring education for the handicapped in the least restrictive environment.

Pennsylvania

Pennsylvania's zenith in full implementation of Public Law 94-142 occurred in 1979-80. By 1980-81, the state had begun a pullback on funds, labor costs rose, federal policy changes were indicated, and other interferences set in. Funding losses are going to make it more difficult to address state priorities for education of the handicapped. A major priority, Parents in Partnership with Education, suffered from the federal Part D reductions, and this represents a major inroad into services to parents. For other professional development, intermediate units use Part B flow-through monies. If Pennsylvania institutes a new funding system, officials expect a limit on special education costs, or a moratorium on full implementation of the law.

Puerto Rico

Puerto Rico receives more money from local budgets than from state funds, and it is already feeling the effects of the Reagan cuts. Some cutbacks are expected in related services and therapies for children. Federal Part D funds no longer support the Dean's Grant project that was formerly used to offer special education credit to regular educators at the Catholic University of Puerto Rico.

Rhode Island

With losses of federal Part D funds, credit courses have diminished and state funds have moved in to replace federal money for the salary of the state CSPD consultant. The losses have also made it impossible to pay for participant tuition in inservice. State dollars for special education training courses have been eliminated completely. This has not been as disruptive to the overall training effort as it might sound. Rhode Island's training needs are changing and the state is offering a variety of formats for inservice training, some of which cost less than the formal credit courses.

South Carolina

In 1982, the state experienced moderate internal budget reductions, which have affected all areas and levels of special education.

The state education agency is completing a training project funded by Part D money for a total of $50,000, which must flow to all districts for inservice. New starts in preservice preparation programs are expected to be impeded by the cuts in the federal training grant program.

South Dakota

No state money is available for inservice in special education, and further federal cuts would create a very damaging situation. The state education agency's retraining inservice program (designed to help solve manpower shortages) could not be continued when its application for continuing Part D funds was denied, and, after efforts by the state and local districts to perpetuate this program, it could not be maintained without the federal funds and has ceased to exist. Progress in statewide cooperation, manifested in a cooperative proposal from higher education, was stymied when the federal government advised against such a cooperative proposal. Cuts in Part D funds have interfered with higher education programs in special education, and the state education agency has been endeavoring to support some of this activity with Part B funds.

Tennessee

Reductions in federal Part D dollars have affected Tennessee's projects in district/higher education collaboration; inservice for developmental centers for multiply handicapped and deaf-blind children; inservice in behavior management, particularly with young children; and the state's Comprehensive Committee for Personnel Development. Quite a bit of Part D money has also been used over the past few years to upgrade the skills of teachers of the severely handicapped. Part D cuts have caused reductions in university programs, and the state education agency is filling in with Part B funds.

Texas

The federal Part D fiscal cutbacks are causing everything to be spread very thin. This is particularly true of preservice preparation projects in higher education, which have suffered particularly from new federal policies and funding levels. Moreover, in early 1982, the Texas Comprehensive System of Personnel Development was itself in jeopardy of discontinuation. By year's end, the CSPD activities had been more or less assigned to the state's education service centers.

Utah

To solve the problem of manpower shortages, Utah needs its preservice training programs to expand. If federal Part D funds continue to be diminished, the problem will become worse. There are five training institutions in the state for special education. The University of Utah's programs are supported up to 40 percent by Part D monies, but the Regents may be able to replace much of this with state funds. Utah State University at Logan receives 30 percent of its training funds in special education from Part D.

Vermont

Reductions in federal Part D funds have thus far had the greatest effect on preservice training in higher education. Fewer preservice trainees are expected to be enrolling, and tuition and living stipends can no longer be offered to those who do enroll. The financial effect on inservice has not yet been severe, but has created a lot of stress as people find it necessary to double up on their jobs.

Virginia

Higher education training programs in special education have been hit fairly hard by the federal cuts in Part D funding. They have very little money and are reducing their programmatic activities. Inservice has received a very minimal amount of federal funds subsequent to the Part D cuts and policy shifts.

Washington

The state budget declined in 1982, and local levies are expected to decline in 1983. Washington officials are dealing with plans for getting through the state financial crisis, and reductions in 94-142 funds would punish special education doubly. Many trainees continue to desire preservice training in special education, but some state universities have had to cut back in these programs; these program reductions have been minor to significant, depending on the program and funding source.

West Virginia

Reductions in the federal Part D training funds have not yet made a major difference in West Virginia. However, if the state gets alternative mechanisms for the training of personnel, it will have to be through federal funds.

Wisconsin

Much inservice in special education is paid for by district flow-through dollars, a set- ·ide at the state level, and by vocational education dollars. Projects that stand to suffer from further cuts in federal Part D funds include those training personnel in the severe handicaps, and a trainer-of-trainer project centering on preparation of personnel to teach emotionally disturbed pupils. Although higher education recognizes needs for revamping of special education training curricula, there is question as to whether changes can take place in the face of declining university budgets.

Wyoming

The state and local districts provide some training funds, but the denial of one of the state ed·ication agency's Part D grant applications has placed its CSPD and inservice specialist positions in jeopardy after 1982-83. When reductions in the Part D program began, the state had to cut the follow-up components of its inservice projects in order to compensate for early losses of funds. The majority of inservice is paid for by district flow-through dollars and a set-aside at the state level.

State Laws

Against a background of uncertainty concerning future federal policy, state policy emerges as more crucial regarding preparation of personnel for the education of the handicapped. Of the 54 jurisdictions surveyed, 32 reported that state or territorial statutes contained some language pertaining to inservice teacher education, professional development, the Comprehensive System of Personnel Development, or other recognition of the need for the training of personnel. On the other hand, 22 jurisdictions reported that their statutes or regulations contained no such language.

The following are the 32 jurisdictions whose statutes or regulations do include language on professional development:

Arkansas
California
Colorado
Connecticut
Florida
Georgia
Hawaii
Idaho
Iowa
Kansas
Kentucky
Louisiana
Maine
Maryland
Michigan
Montana

Nebraska	South Carolina
New Hampshire	Tennessee
New Jersey	Texas
New York	Virginia
North Carolina	West Virginia
Ohio	Wisconsin
Oklahoma	Puerto Rico
Oregon	Bureau of Indian Affairs

The language on professional development in statutes or regulations varies considerably. Florida's teacher education centers are fully funded and authorized by the state legislature, and every school district is served by these centers. In New Jersey, a major change in the state code in the past two years has been the addition of a requirement that each school district have a Comprehensive System of Personnel Development, and the state has prepared districts in advance for accepting this responsibility. Virginia's language is contained in the state's new "Standards for Quality in Virginia," which has been endorsed by the legislature.

Conversely, many statutes or regulations contain only weak, general statements on professional development or simply authorize that two or three inservice days be set aside each year for the training of all teachers. In some jurisdictions, the professional development language pertains only to the state's recertification requirements, and specifies only the clock hours of training required to renew the teaching certificate periodically, and the professional development mandate so stated is a blanket statement covering all personnel.

Jurisdictions hard hit by the recession may have mandates for ongoing professional development but have lost the legislative allocation for the activities. The Michigan legislature, for instance, has mandated personnel development money on the basis of numbers of staff but, for 1982-83, the legislature did not approve this allocation.

The following 22 jurisdictions do not have statutory or regulatory language that refers to the professional development of personnel:

Alabama	Minnesota
Alaska	Mississippi
Arizona	Missouri
Delaware	Nevada
Illinois	New Mexico
Indiana	North Dakota
Massachusetts	Pennsylvania

Rhode Island	Washington
South Dakota	Wyoming
Utah	Guam
Vermont	District of Columbia

Although they may have a broad, general statement regarding the training necessary for the employment and certification of personnel, these jurisdictions do not have statutory or regulatory language to authorize continuing professional development, manpower planning, a Comprehensive System of Personnel Development, nor any similar arrangement.

Alabama's statement appears in State Board of Education regulations, as opposed to state law. It makes reference to scholarships for professional personnel who seek specialized training, but does not encompass continuing education or overall development of personnel.

The District of Columbia has no legislative equivalent of a law for the education of the handicapped. The Board of Education is not part of the city's administrative structure, and the mayor and his administrative staff are separated from the Board. Any law would have to be an interagency agreement. The District does, of course, have a State Plan for the implementation of Public Law 94-142, and it is this document that contains language on personnel development.

In Utah, there is no language on personnel development in state law, but the language of the finance law says that state money can be used for personnel development.

With few exceptions, spokespersons for all 54 jurisdictions emphasized the importance of the federal Part D training regulations as a needed sanction for state and local personnel development work. Among jurisdictions with stronger statutory statements, spokespersons believe that the loss or weakening of the Part D regulations and training funds would have a profound effect on continuing state support for personnel development, given the dire fiscal situations in which many jurisdictions are now operating. Those jurisdictions that lack statutory or regulatory language with reference to professional development agree generally with the Montana official who said that the loss of the federal mandate for personnel preparation would "kick it in" at the state and local levels.

The Impact of Public Law 94-142 and the Federal Funds

Among the 54 jurisdictions, only New Mexico has elected to provide education for the handicapped apart from Public Law 94-142. Among the 53 remaining jurisdictions, many had state laws and regulations pertaining to the education of the handicapped in the

early 1970's, as precursors to the passage of Public Law 94-142. Where state or territorial laws did not exist before 1975, the passage of the federal Law brought about pressure that led to the enactment of new laws afterward.

Where laws predated Public Law 94-142, most participants in this survey reported that the combination of state and federal law made a dramatic difference in services to handicapped students in the public schools. For some jurisdictions, Public Law 94-142 gave clout to state or territorial law or provided the lever that made things work. In many cases, little that has been accomplished since 1975 could have been carried out without the stimulus of the federal funds for education of the handicapped and the federal Law that regulated the use of funds. For example:

> "In Guam, the dramatic increase in public education services for handicapped children has been brought about by Public Law 94-142. Before the Law was passed, handicapped children were served exclusively in two state schools and only a few teachers had certification. Today 350 people are serving these children in the schools, and most of these are fully certified individuals. There is one organized parent group on Guam (The Marinas Association for Retarded Citizens), and there has never been a due process hearing. What has been accomplished has come about through the Law. There is now a very large inservice training program for regular and special educators that targets 50 percent of the educational force on Guam. This is Guam's only inservice training program other than a small bilingual/bicultural project."

In jurisdictions that had instituted special education programs prior to 1975, the federal Law and funds have had the additional effect of allowing state and local education agencies to more widely demonstrate what could be accomplished. Thus, statewide programming now exists where only model demonstration projects had been possible in the early 1970's. The federal mandate and funds have also assured greater consistency and continuity of services for handicapped students across states and territories. Indeed, interference with the Law, the regulations, or the funds might lead, as one spokesperson put it, "to a return to the 1940's, philosophically and financially."

Expansion and Improvement of Services

Public Law 94-142 and its funding are seen as the major vehicle for stimulating and continuing educational programs for

handicapped students. Services expanded more rapidly and have become more flexible, and their quality has steadily improved. Educational opportunities at the preschool and secondary level have multiplied, and teachers are using better methods, materials, and equipment. Moreover, the Individualized Educational Plan has provided a focus for instruction that did not exist before. These and other program improvements have been particularly notable in rural and remote districts, which have been great beneficiaries of the federal Law and funds. Many participants in this survey repeatedly reported, however, that growth had diminished as the economic situation worsened and policy changes continued. Program cutbacks increased case loads, and denial of services are the anticipated consequences of diminishment of funds and/or any changes in federal regulations.

Identification of Eligible Children

Child-find activities stimulated by Public Law 94-142 led to the identification of many more children who are eligible for and now receiving educational services in the public schools. In some jurisdictions, service is now provided for up to six times as many handicapped children as was the case in 1975. Through better identification, more equity in educational opportunity has been achieved. Jurisdictions are also able to make more realistic projections of needs, and students are given more thorough, more accurate, and less discriminatory assessments.

The expansion and continuation of the national child-find program has also brought many children out of state institutions. Federal funding is generally considered to have made the crucial difference in the provision of educational services to severely handicapped, multiply handicapped, and sensorially disabled children, many of whom were heretofore segregated from society in institutional settings.

A concern common to many participants is the matter of how long programs for severely handicapped students can survive under the current economic circumstances in many jurisdictions. Because these services are more costly, they are more vulnerable to reduction or discontinuation. Similar concerns have been voiced regarding economic constraints that necessitate placing ever larger numbers of mildly handicapped pupils in regular education, with or without adequately prepared personnel. Respondents view possible changes in the Law or the regulations as dangerous to the equity of educational opportunity promised by the Law, and envision that regulatory changes

could lead to an elimination of services to the severely handicapped, a massive movement of mildly handicapped children into regular classrooms, and specialized instructional and related services available only to the moderately handicapped population.

Parental Involvement

The Law's mandate for parental involvement in educational decision-making has done much to guarantee student rights. The due process aspects of the Law are regarded as highly important measures for ensuring fairness without the necessity of resorting to litigation. Parental involvement has opened up special education programs to greater public scrutiny and, hence, greater accountability. In addition, the Law's impact on the quality of family life in the homes of handicapped children is reported to have been immeasurable.

Placement in the Least Restrictive Environment

In many jurisdictions, Public Law 94-142 brought into practice the entire concept of least restrictive environment and the normalization of handicapped students. The Law and federal funds have been useful in sensitizing regular education to the needs and characteristics of handicapped students and in preparing the way for their placement in the least restrictive appropriate setting. Moreover, nonhandicapped school children, as well as the public, have become more understanding and accepting of handicapped individuals.

Interdisciplinary and Interagency Cooperation

In combination with Section 504 of the Rehabilitation Act of 1973, Public Law 94-142 has brought the need for interagency cooperation into the open. These laws have created leverage in such agencies as public health, social services, and corrections to develop their own programs for handicapped individuals and to collaborate with public education in so doing. Greater cooperation is also developing between schools and community agencies, as well as among the various disciplines that interact in providing full educational services for handicapped students. Finally, the formation of district cooperatives for provision of educational services has also increased as a function of the federal mandate.

Related Services

Public Law 94-142 has done more than any state or territorial mandate to add such related services as occupational and physical therapy to educational programming for handicapped students. Because related service personnel do not generate a reimbursement of state funds on a full-time equivalent basis, districts have used the federal funds to pay for these services. Participants in this survey believe that related services are quite vulnerable to discontinuation if federal funds diminish or if regulations are changed.

Policies and Procedures

Compliance with Public Law 94-142 has tightened overall accountability in education for the handicapped, and has led to improved quality through its on-site monitoring requirements. More definitive policies and procedures have been developed by state and local education agencies, and there have been many improvements in state certification standards and requirements.

The Inservice and Preservice Preparation of Personnel

While jurisdictions reported a variety of benefits as a result of Public Law 94-142 and the availability of federal funds for education of the handicapped, 39 of the 54 reported in this survey (including the state of New Mexico) commented that possibly the greatest impact of the Law and the funds had been on the inservice and preservice preparation of personnel and on the systems of personnel development required by the Law.

New Mexico, which has elected to provide education for the handicapped apart from the requirements of Public Law 94-142, has open-ended state funding for the education of handicapped children, which is currently at $74 million. If handicapped children are identified and personnel can be found, "the money flows." Thus, New Mexico is not hurting for program development and expansion resources, except in the recruitment and retention of qualified personnel, and it is this, and this alone, that inhibits New Mexico's potential progress. "Other states are ahead of us by using the 94-142 money for personnel development. We fully comply with Section 504 and, in many ways, we are surpassing what Public Law 94-142 requires, but in actual implementation, the personnel are not there."

In the other 38 jurisdictions in which professional development has been remarkably advanced by the Part D program and personnel preparation funds from the federal government, these features are viewed as instrumental in program expansion, program improvement, parental involvement, and many other of the advancements achieved in the past seven years.

Alabama. "The Comprehensive System of Personnel Development requirements of Public Law 94-142 have had an impact. Otherwise, there would not have been money to use for preservice and inservice training in special education to meet all the new requirements and the expansion of services."

Alaska. "In addition to child find and education of the severely handicapped, the impact of Public Law 94-142 has been on our capacity to provide inservice education to our personnel all over the state. Part D monies have been the primary impetus of inservice training on a statewide basis. These funds have allowed us to design a unique program to meet personnel preparation needs, particularly in remote rural areas."

California. "Because the Law demanded the Comprehensive System of Personnel Development, it made us look for the first time at the value of inservice. Without this, we would not have been able to implement the Special Education Resource Network or programmatic inservice."

Colorado. "Public Law 94-142 caused a focus on staff development and recognition of the necessity of identifying needs and priorities in an organized and cooperative way. This is the biggest impact, regardless of the dollars. We had only begun to scratch the surface."

District of Columbia. "The Mills decree was a forerunner of Public Law 94-142, and it included due process, written educational plans, least restrictive environment, and most of the other provisions. Therefore, while Public Law 94-142 did not make a big programmatic difference, it did make possible additional needed teacher training."

Georgia. "We could not hold our own with the training of personnel if there were no Part D regulations and dollars. We depend on the federal funds for many training resources. Although there is a state commitment to personnel preparation, the dollars just don't exist."

Guam. "All of Guam's progress has hinged off the Law and the funds. Inservice in special education has particularly progressed; before the Law there was virtually no professional development. Last year the state education agency offered 55 courses, with close to 800 participants out of 1300 teachers."

Idaho. "If the regulations for Part D and the Comprehensive System of Personnel Development go, we predict reduced statewide emphasis on personnel preparation and professional development."

Kansas. "Because of Public Law 94-142, more people began to realize the need for inservice. More applied for training and came for it."

Kentucky. "Preservice preparation could expand and improve because of the Law's emphasis on the Comprehensive System of Personnel Development and the Part D funds. Most programs started on grant money."

Maine. "Part D has had a great effect on personnel preparation. A major Part D effort has been in collaborative efforts with higher education. Public Law 94-142 stimulated higher education to participate in inservice also, and it influenced their programming of resources. A lot has been invested in the master's program in the severely handicapped. We need to continue to have quality people available to match that investment."

Massachusetts. "Public Law 94-142 made the most significant change in terms of the Comprehensive System of Personnel Development. This was the thing that Chapter 766 never addressed—personnel development. Without the regulations or the funds for Part D, this will be the big gap in Massachusetts.

Michigan. "Public Law 94-142 tightened up our overall accountability and improved overall quality because it required on-site monitoring, because it increased awareness of needs, and because it expanded and improved inservice for everyone, including ancillary personnel, School Board members, and others."

Minnesota. "The federal law and funds made an impact on personnel training in areas of personnel shortages. We came to rely on federal money for staff development."

Mississippi. "The number of qualified personnel to deliver services to handicapped pupils has increased. Inservice has been extended, and emphasis has been given to training regular educators and resource room teachers to implement the mainstreaming of mildly handicapped pupils. Traineeships have been offered to retrain special educators, particularly in low-incidence areas, such as the severely handicapped. The state's manpower planning group has been effective in establishing procedures for personnel development data-gathering and planning. Most of this has been achieved through Public Law 91-230, Part D, and its funding."

Missouri. "Public Law 94-142 gave us our entire ability to address training. Ninety percent of the 94-142 entitlement dollars

flow to districts, and our 10 percent discretionary money is used for direct services to the deaf and blind populations; for services to the severely handicapped in school districts; and for multi-district cooperative efforts to serve low-incidence populations and preschool handicapped children. Districts can use money from their 90 percent for personnel preparation, but these flexible capabilities will be lost with further cuts, and we would lose the capabilities of the 10-percent discretionary funds altogether. The greatest looming threat is the loss of federal dollars and the threat to the regulations. Personnel preparation is not in the state law. There is state support but not enough money."

Montana. "If training and the comprehensive system of personnel development were taken out of the regulations, and if the federal Part D money were eliminated, this would have a major impact. Part D has primed the pump in our training efforts. A loss of the regulations and the funds would kick it in. In 1977, the legislature looked at special education growth in the state and put a limit on the rate of increase allowed for state funding. Local districts began to pick up some costs of direct services and training, which had been allowed for state funding. Local districts now have to use federal funds to supplement limited local and state resources. There appears to be a greater commitment to the effective use of funds for training, since a good deal of it now comes from the local budget."

Nebraska. "The Public Law 94-142 money has enabled us to do the most staff development. We have made great advances in the Comprehensive System of Personnel Development, inservice and preservice preparation."

New Hampshire. "The CSPD is required for effective 94-142 implementation. The regulations for Part D funds and for the CSPD should be retained. In a small, rural, isolated state like New Hampshire, the CSPD function is absolutely critical to assist local districts to improve the quality of programs for handicapped children."

New Jersey. "Public Law 94-142 undoubtedly made the greatest impact on personnel training. There has been a massive increase in the quantity of statewide and local professional development in the past five years. The over-riding foundation of the increase in inservice has been the Comprehensive System of Personnel Development needs assessment, which is the basis of all state education agency planning."

New York. "The greatest impact of Public Law 94-142 on the state education agency has been in monitoring programs and providing inservice training to personnel. If Part B were

threatened, we would have a difficult training situation. The Regents recognize the need for professional development, but the money is not there."

North Carolina. "In 1975, most of North Carolina's institutions of higher education were still expanding in the area of the mentally handicapped (educable and trainable mentally retarded). Few even had programs on the drawing board for training personnel in the area of emotional handicaps. A few were beginning to offer training in learning disabilities but were relying mainly on school psychologists and reading personnel as instructors. Today higher education has qualified trainers who have also taught in the public schools. Programs have expanded into severe handicaps, emotional disturbance, and other necessary areas. There has also been a shift from total theory to more practical training. This is what the Part D emphasis and funds have helped to accomplish."

North Dakota. "The training emphasis of Public Law 94-142 helped us with much professional development, including traineeships to provide incentives to train new personnel and retrain others for new roles. Without the Part D regulations and funds, we would not have come this far."

Oklahoma. "In our 1976 State Plan, the manpower part did nothing but hold meetings. By 1982, the Comprehensive System has brought local people to change their views of staff development. It will take until 1985 or longer for them to really implement the values of the CSPD. Only with the Comprehensive System of Personnel Development did a real communication system between higher education, the state, and the schools begin."

Oregon. "Both the State Advisory Committee and I communicated to Secretary Bell about the proposed changes in the Public Law 94-142 regulations. We implored him not to interfere with the Comprehensive System of Personnel Development. We could not operate without it."

Pennsylvania. "Public Law 94-142 instituted the Comprehensive System of Personnel Development for us and initiated regular education inservice training. The whole idea of mainstreaming could not have been accomplished without this."

Puerto Rico. "The Public Law 94-142 impact helped to accelerate the development of the delivery of services to handicapped children. Before, we had few services and many negative attitudes and separation of groups. By means of the development of training programs, it has been possible to prepare school personnel, reduce negative attitudes, and move children toward the

school mainstream. Certainly Public Law 94-142 made it in the interest of school personnel to be prepared to serve the handicapped."

Rhode Island. "Without the training funds, the whole concept of mainstreaming would have failed. Teachers and administrators are required to be involved in the IEP process; it is the training that has made them effective."

South Carolina. "Inservice and professional development have been the real impact of Public Law 94-142. Before there was a once-a-year or call-the-state type of inservice just because teachers had to fulfill the five inservice days required by state law. 1975 was a real beginning point for professional development. The inservice requirements here were just a topic before; now they have taken root, and there has been particular impact at the district level."

South Dakota. "Our needs for new personnel were even more severe before the federal Part D funds expanded after the Law was passed. The federal money has particularly helped in training personnel for the severely handicapped. We could never have developed programs in this area without the federal Part D grant. We developed all of our cooperatives with Public Law 94-142 funds, as well as all of our new programs. The money also increased the numbers enrolled in preservice training and the quality of new graduates. It really made a difference."

Tennessee. "We are using Public Law 94-142 funds to develop training manuals for various aspects of special education. Districts have never had this kind of guidance and training from the state level. There is a plan to upgrade staff with state money and money from Public Law 94-142."

Texas. "The Texas state mandate requires every teacher in the state to have a seven-hour block of special education training. This is done with the CSPD funds and federal money on a regional basis. If the federal government does away with training money, and if training comes out of the federal regulations, then Texas will probably have to do away with it, too."

Utah. "Before Public Law 94-142 was passed, there was absolutely zero money for any sort of personnel development. Today the state can address specific needs with inservice."

Virginia. "Federal Part D personnel preparation funds have supported a collaborative effort to improve teacher preparation programs. Without these funds, Virginia would not have its Deans' Institutes, which have been forums for the discussion of all facets of teacher training between the special educator and the general educator. Without these funds, 16 private colleges

without special education programs would not have had access to special education resources (paper and people). The emphasis on the Comprehensive System of Personnel Development has helped us to emphasize personnel preparation, both preservice and inservice."

Vermont. "The federal Part D funds supported the University of Vermont's model training program for consulting teachers. This made us better able to recruit experienced teachers and to support them."

Washington. "Inservice has improved in the past five years because the Part D grant provided a new state position to coordinate training, and the most has been made of this possibility in creating liaisons. In fact, the training of personnel in a coordinated way is a whole area that has come about through Public Law 94-142."

West Virginia. "Public Law 94-142 has had a direct impact on the certification/permit structure. If we get alternative mechanisms, it will be through federal funds, and then the regional education service agencies can work with higher education to do things."

Wisconsin. "Public Law 94-142 has had a great impact on personnel preparation. Many efforts are being made by districts to train regular educators and parents. This will be one of the biggest payoffs in the long run."

Wyoming. "As a result of Public Law 94-142, there is a great deal more inservice and professional development. We worry for the future if the regulations are watered down. These things should not be left to the hope of individual and political integrity."

Discussion

Although many jurisdictions had laws and regulations pertaining to the education of the handicapped prior to the enactment of Public Law 94-142, these statutes generally delineated services for children and neglected to establish provisions for the preparation and continued development of personnel to provide these services. These provisions are the legacy of Public Law 94-142, which has provided the strength for activities in inservice and preservice training in the jurisdictions surveyed. The majority of participants in this study believe that a major impact of the Law has been its value as an enabling factor in the preparation of personnel and in the comprehensive planning for professional development.

The strategic importance of the Comprehensive System of Personnel Development portion of Public Law 94-142, of the federal grant program in personnel preparation for education of the handicapped, and of the influence of the Special Education Program's Division of Personnel Preparation is demonstrated by their identification as mainstays of much of what has been accomplished in supplying and qualifying manpower for the education of handicapped students. The fact that 22 jurisdictions have no statutory or regulatory language to support any sort of personnel development, and that statutory language is weak in many jurisdictions that do have it, shows just how important the federal influence has been and implies the void that would open up without it.

The federal Handicapped Personnel Preparation Program has traditionally been interpreted by the government as "seed money," intended to assist in initiating programs in professional preparation with the intention that resources would be forthcoming in jurisdictions to perpetuate those whose services continue to be needed. Problems associated with the supply of qualified personnel for special education illustrate the need for the continuation of many federally funded personnel preparation projects. But now there are few state or local resources for maintaining many forms of preservice and inservice training, and some of those that have previously been state-supported have been reduced or eliminated. It is also evident that the federal grant program, at its current funding level, is not sufficient to support large-scale solutions to the complicated problems of manpower supply and deployment that exist.

Although the improvement of public education is currently a popular cause, and much concern is centered on the quality of teachers and teaching, state and federal policy makers are not uniformly assuming the responsibility for changing the status quo. Clearly, however, we are not going to get educational excellence on the cheap. Yet, "we are told that education is a national emergency, but that the national government should merely cheerlead for the rescue operation. We are told that excellence doesn't cost money, but that states should pay for it" (Down, 1983, p. 10). At this juncture, where issues of quantity and quality and equity merge, the economic and social policies that are shaping decisions appear to be contradicting one another.

If we choose to continue defining manpower demand in terms of the number of vacancies filled or by unfilled positions for which the student population is already identified and enrolled, then we will be choosing to maintain the status quo that has

been described by participants in this study and which represents the mediocrity with which public education is being charged. If, instead, we choose to define manpower demand according to the level and quality of services that a school district should maintain in order to meet or maintain full educational opportunities for all children, then we are opting for the excellence that is sought. If excellence is to be the option, the evidence reported in this study undeniably supports the need for additional new, qualified personnel (through preservice preparation) and the need for better quality of practicing personnel (through inservice development), as well as the need tc improve the efficiency and demonstrated effectiveness of all forms of personnel preparation.

If the quality of instruction and service depends on the skills, knowledge, expertise, understandings, and sensitivities of the people who deliver instruction and service, then the supply of appropriate personnel is paramount in the achievement of excellence. The task at hand is to reinforce this fact to state and federal policy makers, state and local administrators, and to the personnel themselves.

References

Down, A. G. Executive Director of the Council for Basic Education, before the National Press Club, Washington, D.C., 1983. Cited in M. Caldwell. President Reagan's report card. *The New Republic*, November 7, 1983, 8-10.

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Chapter 7

Summary: Supply and Demand From a Programmatic Viewpoint

Responses to this survey showed that expansion of special education programs and services has slowed since 1980, that many school districts are struggling to maintain the status quo with fewer resources, and that fiscal constraints have begun to overtake the effects of Public Law 94-142 as a stimulus to action. These reports verify the findings of an earlier longitudinal study of selected school districts' responses to Public Law 94-142 (SRI International, 1982).

Among the 54 jurisdictions included in this survey, only 14 did not end fiscal 1982 with budget deficits; for most of those with balanced budgets, fiscal stability was achieved only through austerity measures that included cutbacks in budgets for public education and higher education. Even in jurisdictions with revenue surpluses, there appeared to be some withdrawal of support for education. Variations in the financial statuses of jurisdictions suggest considerable disparity in the funds available for educational services. Variations in per-pupil expenditure and teacher salaries suggest further inequities.

Although the incidence of handicapped children and youth in need of special education services was formerly estimated to be approximately 8 million, the figures for 1981-82 (U.S. Department of Education, 1983) show that only about 4¼ million students between the ages of 3 and 21 were being served under the provisions of Public Law 94-142 and Public Law 89-313 in the 50 states and territories.

Supply and Demand

Only twelve jurisdictions reported a full complement of preservice personnel preparation programs operating within their boundaries to supply new graduates for the various roles necessary to educating handicapped students. The higher education programs most frequently absent from jurisdictions are those to prepare personnel in: visual handicaps, hearing handicaps, occupational therapy, multiple handicaps, severe emotional disturbance, and severe retardation. Analysis of several multistate areas indicated that regional deployment of graduates

to multiple jurisdictions does not ordinarily compensate for lack of preservice programming.

The Supply of New Graduates

Only two jurisdictions reported that the supply of new graduates from their own institutions of higher education should be sufficient to meet current and near-term demands for personnel. One of these was among the twelve that have a full complement of preservice preparation programs; this state anticipates no near-term problems with the supply of new special education graduates because the economy is not only holding back development but has already caused some significant reductions in the teaching force. The other (a very small state) qualified its statement of self-sufficiency by stating that, when programming expands, demand for personnel will probably exceed supply of new graduates. Other jurisdictions with a full complement of higher education programs nevertheless reported serious shortages of personnel in some specialties, and one jurisdiction with a complete spectrum of preservice programs reported serious shortages of all types of special education personnel.

Production of new graduates is reported to be uneven in some jurisdictions, in that higher education may be producing too many of some specialists and too few of others. However, many certification policies permit educators certified in one specialty, or for general K-12 special education, to serve a variety of handicapping conditions and to fill various roles. Therefore, large numbers prepared in one specialty area for which demand is low may be assigned to positions in a different specialty area where demand is high. These practices blur imbalances in the supply of and demand for new graduates. Further, in jurisdictions where dual certification requires teachers to be certified in regular education, as well as in special education, the numbers of people who actually take special education positions may be considerably different from the numbers who receive training.

Some jurisdictions report heavy losses of newly prepared personnel to their neighboring states where salaries and other incentives are better, or where teacher education is more expensive than in the jurisdictions where they trained. The lack of graduate follow-up in most jurisdictions makes the magnitude of this movement difficult to estimate.

A relatively small number of jurisdictions appear to have made progress in solving recruitment problems in many service delivery areas. Here, undersupplies of new graduates reflect

efforts to continue expansion and diversification of special education services to meet the needs of children. Jurisdictions with large stretches of remote territory, on the other hand, experience attrition rates that match or surpass the rate at which new trainees graduate. Thus, expansion cannot be pursued nor operation maintained without recruitment elsewhere and without many other efforts to place personnel where they are needed.

Pupil Enrollment and Preservice Enrollment

Enrollment of new special education trainees in preservice preparation programs is down in 29 jurisdictions, steady in 20, and increasing in only one (4 did not respond). The enrollment of handicapped pupils in public schools is decreasing in 15 jurisdictions, steady in 14, and increasing in 25. Comparisons of the direction of pupil enrollment and new personnel enrollment within jurisdictions suggests an impending shortage of new personnel, on this basis alone, in 28 of the 54 jurisdictions reporting. Respondents also reported anticipated increases in the overall pupil enrollment, beginning in the mid-1980's and continuing to the end of the decade.

Where handicapped pupil enrollment is up, identification of children continues to be a priority, services are expanding in such areas as preschool and secondary education for the handicapped, and/or new groups of children are being deinstitutionalized. When handicapped pupil enrollment is down, there are numerous occasions of teacher layoffs, leveling off of services, more stringent definitions designed to limit numbers of eligible children, and/or other measures necessary to meet fiscal contingencies but prohibitive to program growth and, therefore, to including more children in the provision of services.

Figures from the federal Special Education Programs office show that approximately 22,000 new special educators are expected to graduate from higher education programs in 1983-84, but that the current rate of attrition among practitioners in the field is 25,000 annually. But estimates of rising, falling, or stable preservice enrollments may be artificially expanded by increasing numbers of regular educators re-entering higher education to gain certification in special education as a hedge against reductions in force. Preservice enrollments are also expanded by large numbers of provisionally certified personnel who must demonstrate their eligibility for full certification in special education at some future time. Both kinds of enrollment are prevalent in the single jurisdiction that reported an increase in persons entering preservice training.

Several jurisdictions have recently instituted, or have plans to institute, more stringent standards for admission into higher education, or teacher tests for certification, or procedures for supervising and evaluating new teachers during the first year of service, or all of these. Teacher tests are said to be having some negative effect on entry into training and entry into the profession, which it is their purpose to do on the basis of standards for minimum quality. However, it is reportedly possible, when occasioned by severe shortages of certain personnel, for officials to maneuver the competency criteria of a teacher test in the effort to ensure that a reasonable number of new teachers will pass it in a given year. Another concern about teacher testing is possible bias against members of minority groups, whose enrollment in preservice preparation was singled out as declining by several respondents.

At the same time, higher education has suffered from program cutbacks and reductions in force, thus limiting the program options and admissions slots available to those who do wish to pursue preparation in special education. By the time university production is reduced to match current depressed conditions in higher education, the demand for teachers will be greater than it is now. The picture that emerges concerning preservice enrollment and pupil enrollment portrays a gap between personnel supply and demand that will probably continue to widen throughout the decade.

Consistent Shortages of Personnel

Among the 54 jurisdictions surveyed, 22 experience personnel shortages well into the school year. These shortages can encompass as many as 100 open positions several months after school opens and, in some cases, it is not possible to fill these openings with fully qualified personnel at any time during the school year. Such situations prevail more predominantly in rural and remote districts, where lack of certification reciprocity among many states is reported to interfere with recruitment efforts.

A general shortage of many types of special education personnel was reported, with serious shortages of certain types of personnel: occupational therapists; physical therapists; speech clinicians; personnel to work with students who are emotionally disturbed, behaviorally disordered, severely retarded, severely emotionally disturbed, multiply handicapped, visually handicapped, or hearing handicapped; and personnel for special education in the secondary schools. Not all districts are equally

affected by these shortages. Those most profoundly affected are those with relatively low local wealth, isolated rural settings, inner city schools, and districts far from teacher education institutions. Even the most widespread demands for personnel are somewhat muted by the fact that many districts are far from full services for students with certain handicaps or at particular age levels.

To the extent that shortages are more serious in certain geographic and socioeconomic settings, these needs will not be met simply by increasing the supply of new graduates. However, scarcities of personnel are not exclusive to these settings, and any limitation on numbers of available personnel promotes mediocrity because it limits selectivity. Therefore, a first step toward the improvement of education would involve preparing and deploying a very adequate supply of qualified personnel so that standards of competence would be raised (not lowered), so that the work force would be composed of skilled and knowledgeable (not marginal) personnel, and so that merit (not mediocrity) might be recognized and rewarded in the profession of education.

Reductions in Force

Since 1981, reductions in force have affected special education personnel in 24 jurisdictions. All reported reductions in force have occurred in urban centers, and any small surpluses left behind have been composed of teachers whose qualifications are for instruction of mildly to moderately handicapped pupils, as well as a few clinicians. In 12 jurisdictions, the outcome of some reductions in force has been the "bumping" of recently trained special educators by regular educators who have seniority. Certification practices in some jurisdictions permit regular educators to teach handicapped students with minimal credits in special education; in some instances, no practical experience with handicapped students is required if one has already done regular classroom teaching.

Surpluses

Most of the 30 jurisdictions reporting surpluses of special education personnel attribute them to reductions in force, to program reorganization, to changes in case loads or instructional groupings, or to combinations of these events. In several jurisdictions, a surplus appeared for the first time in 1982. All are described as small urban surpluses of teachers of mildly to moderately handicapped students and clinicians, often in states

where some vacant positions in rural, remote, or inner city schools could be filled by the surplus personnel if they chose to work in such locations.

Attrition

All but four jurisdictions expressed concerns about attrition of personnel. There are reports of rural districts in which entire teaching staffs leave after one school year or in less than a year (100-percent attrition). Otherwise, rural attrition rates as high as 50 percent are reported, and attrition of personnel in inner city schools is also excessive.

Apart from attrition that is specific to geographic and socio-economic factors, general attrition rates as high as 20 percent among special educators are reported. Among teachers of emotionally disturbed and severely handicapped students, burnout may account for attrition rates as high as 30 percent every three to four years.

Four jurisdictions report improvements in attrition rates in the past few years. In each case, the major factor appears to be that few alternative jobs have been available, the job market has been uncertain, and the troubled economy has limited options for other employment. Most jurisdictions expect a major increase in the number of teachers who leave the profession when the employment picture brightens.

From a Programmatic Viewpoint

Contractual arrangements for services of certain specialists have long been used in rural areas but are now increasing, for budgetary reasons, in certain urban centers. The greatest number of contractual arrangements involve physical and occupational therapists, whose availability for special education is very limited. Because of costs and limited availability in the hiring of therapists, some jurisdictions are training and encouraging special educators and elementary teachers to perform many therapy functions.

Even when therapists and other scarce personnel can be found in remote areas, their employment is surrounded by inordinate expense and logistical complications. In this regard, counts of open and filled positions do not reflect the realities of supply and demand, for such numerical tabulations cannot account for the rural dilemma of justifying one full-time employee to meet fractions of needs in districts separated by hundreds of miles.

Although one-third of an employee's time may be needed to provide services in each of three remote districts, adding them up to represent the need for one professional obscures the real need. Thus, the actual demand for personnel is greater than that reported by manpower data systems in many jurisdictions with large expanses of remote territory.

Busing and Foster Home Placement

Multi-district cooperatives for special education often focus on providing an education for children with severe, multiple, or sensory handicaps. One solution is to provide educational services in a central location to which children are brought, and this means busing. Twenty-one jurisdictions report considerable busing of these students, and the distances covered by severely handicapped children can be up to 90 miles each way.

A variation of the rural cooperative model is the cooperative agreement between rural and urban districts, whereby rural handicapped students are "tuitioned in" to urban districts. Among the eight major cities of one jurisdiction, for example, half of the handicapped student population is bused into urban schools from rural communities. Manpower shortages and staffing problems in rural districts also necessitate the placement of some handicapped students in foster homes and boarding homes in cities at a distance from their home communities.

Student:Teacher Ratios

Among the 54 jurisdictions surveyed, 36 reported that student:teacher ratios for education of the handicapped emanate from such authority as formalized state policies and procedures, state administrative rules, state statute or regulation, superintendent's directive, or similar authority. In the remaining 18 jurisdictions, there is no regulated authority concerning the ratio of handicapped students to instructional personnel but, rather, informal guidelines or district autonomy on the matter. In 39 jurisdictions, student:teacher ratios were developed some years ago and are thought to have evolved through professional consensus or "armchairing." Only 15 described precedents or rationales involving task force work, standards of professional organizations, reports of effectiveness data or the like.

All but six jurisdictions are vulnerable to the expansion of class and case loads by virtue of the fact that the remaining 48 have the authority to grant exceptions or waivers to the often

increasing requests from local districts to exceed formal or informal guidelines on class size and case loads. Twenty-six jurisdictions reported evidence that student:teacher ratios in actual classrooms are either increasing or have reached maximum allowable limits on the average, with numbers exceeding the maximum in some or many settings. The tilting of ratios is reported as attributable: to shortages of personnel; to recruitment difficulties; to reductions in force; to cases where a small number of handicapped students represent an overload for one teacher but not of the size thought to justify an additional full-time employee; and to program reorganizations that reduce human resources without a corresponding decrease in the handicapped pupil population. In only two jurisdictions is there evidence that the ratio of handicapped students to instructional personnel might change in a positive direction.

Programs for Handicapped Children and Youth

Many jurisdictions described the impossibility of establishing classroom programs or other services without adequate manpower. One reported that, during the 1981-82 school year, 45 rural district programs for the education of the handicapped were not implemented because no personnel could be found to conduct them.

In attempts to circumvent personnel shortages and to stretch dollars and manpower, districts may place pupils with different varieties of mild, moderate, and severe handicaps together in multicategorical groups, with one instructor and perhaps an aide. This practice is widely reported to be abused at the local level, because it is not necessarily reserved for the mildly handicapped and because even the best teacher would probably not have the skills to handle the diversity of learning needs. Nonetheless, this practice is said to be administratively desirable because of the flexibility it offers in assigning personnel who are in short supply. Similarly, it is reported that the resource room is often the model of choice for handicapped students, on the grounds that total costs of resource room instruction often come from the state, whereas local districts are obliged to pay part of the costs for each handicapped student educated in self-contained programs.

Pupils with Mild to Moderate Handicaps. This survey revealed an extensive trend toward moving children with mild to moderate handicaps into less and less restrictive environments, specifically into regular classrooms with an Individualized Education Plan or into combinations of regular class and resource room

instruction. Although regular class placement is much to be desired when it is the most appropriate placement, with trained personnel and proper supportive services, the trend reported here appears to be greatly influenced by economic pressures.

Two jurisdictions describe a move in the opposite direction: toward more self-contained classroom instruction and less resource room placement for mildly and moderately handicapped pupils.

Pupils with Low-Incidence Handicaps. Varying numbers of children and youth who have low-incidence handicaps remain in state institutions; only one jurisdiction reports near completion in bringing these individuals into the community. Comprehensive district programming for low-incidence handicapped students is the exception, rather than the rule. In efforts to provide for identified and eligible individuals with low-incidence handicaps, districts make widespread use of homebound instruction, group homes, foster homes, day training centers, day care, private and public mental health facilities, residential centers, and out-of-state placements. Many report that programs would be established in the public schools if personnel could be found to staff them.

Pupils in the Secondary Schools. Among the 54 jurisdictions comprising this study, 29 listed shortages of personnel for secondary education, 48 reported very serious concerns about the quantity and quality of secondary education for the handicapped, and most reported that secondary programming was the weakest link in the continuum of special education services. Where secondary programming is flawed, the inadequacies occur across both urban and rural districts, and the consensus is that the shortage of qualified personnel is the single most frequent impediment to expansion and improvement. The problem is also circular (in this and several other specialty areas) inasmuch as the very lack of programming makes the demand for personnel seem less significant than it really is. State practices in certifying personnel for service in kindergarten through grade 12 are seen as contributing causes of this problem.

Personnel Qualifications

When supplies of any resource are plentiful, the tendency is to sort and select the superior; when supplies are scant, one settles for less. In special education, the most widespread solution to problems of personnel shortages and recruitment problems is the issuance of certificates to persons who do not demonstrate

the preparation, experience, qualifications, and other criteria ordinarily used for certification. Up to 30 percent of the personnel in some jurisdictions are thus working with children with whom they have had minimal experience or preparation, and no jurisdiction is free of the need for provisionally certified personnel.

In addition, many comprehensive special education teaching certificates do not restrict the areas in which a certificate holder can work, but only specify the area of specialization for which the holder was trained. This introduces further ambiguity to issues of quantity and quality. Because so many positions are filled inappropriately or inadequately, traditional data on manpower supply and demand are not specifying the true nature and dimensions of the need.

Certification policies in many jurisdictions and administrative policies in many locations make it possible for districts that cannot find teachers, at the salary levels offered, to *decrease the demand* for personnel by reorganizing programs, regrouping pupils, exceeding ratios, and placing more children in regular education, frequently without the instructional expertise and support necessary for their educational achievement. These same policies also make it possible for districts to *increase the supply* of personnel by assigning to special education those individuals who are neither prepared, qualified, nor certified to work with handicapped students. As the pool of qualified personnel diminishes, these practices will increase.

Inservice and Preservice Programming

Many jurisdictions reported that inservice resources are being diverted to the training of educators to assume new roles and attain new endorsements in areas of personnel shortage, and to provide training for provisionally certified personnel in order that they might become fully certified for the positions they are filling. Some report that vast staff development needs have shifted the emphasis from preservice to inservice preparation of personnel, a move seen as particularly necessary in view of the apprehension that further cuts in state and federal budgets may liquidate some preservice preparation programs in higher education.

Twenty-two jurisdictions are using inservice funds, tuition assistance, and other means to retrain and recertify practitioners to fill positions in critical shortage areas in special education. It appears that 30 to 40 percent of inservice offerings may address issues of manpower demand, while the remainder may be designed to improve and update practitioners' skills. At the same

time, some proportion of higher education trainees also represent personnel pursuing new roles in special education or full certification. Thus, problems of manpower supply, demand, and deployment are apparently blurring certain distinctions between inservice and preservice training.

Inservice Training

Training for personnel in regular education was far and away the greatest single thrust of inservice in 1982, reported as a priority by 45 of the 54 jurisdictions. In this survey, classroom teachers far outnumbered administrators as the intended recipients of training. This emphasis follows the movement of handicapped children into regular education classrooms. It is an extreme irony that the movement toward the least restrictive of all educational environments is now accelerating after the federal thrust and stimulus in this direction have been abandoned. It is an even greater irony that this trend is occurring because financial problems in many districts prompt the need to provide education in the least expensive environment.

The second largest cluster for inservice participation was composed of personnel serving the severely retarded and multiply handicapped (priorities in 25 and 17 jurisdictions, respectively). The most common explanation of this priority was the effort to specialize personnel whose preservice preparation in cross-categorical or noncategorical programs did not include a strong emphasis on dealing with the more severe handicaps in their specialty areas. While noncategorical and cross-categorical certification and preparation enable districts to be more flexible in assigning personnel, many jurisdictions must provide on-the-job training to those assigned to low-incidence populations.

Vocational educators for special education and other secondary personnel (21 and 15 jurisdictions, respectively) compose the third largest group of inservice participants. This group includes still more regular educators. The fourth largest single category of inservice participants was the mixed group of "overall special education personnel" (23 jurisdictions), some of whom are receiving training in additional specialties so as to work with multicategorical groups. The fourth largest cluster of inservice recipients was made up of personnel educating emotionally disturbed and behaviorally disordered students (17 jurisdictions) and severely emotionally disturbed students (12 jurisdictions).

Although jurisdictions generally reported a cessation in the need to provide inservice instruction on most issues relevant to compliance with Public Law 94-142, the major compliance issue of "least restrictive environment" ranked first in topical priority for inservice in 43 of the 54 jurisdictions. This topical priority coincides with the top ranking of regular educators as targets for inservice and underscores the movement of handicapped children toward regular education.

Inservice emphasis on the Individualized Education Plan continues in 21 of the jurisdictions. Many reported that the focus of training centered on problems of inexperience and lack of skill among practitioners in the participatory teamwork, communication, interdisciplinary processes, consultation and other skills involved in developing and implementing the Individualized Education Plan.

Preservice Preparation

Many respondents agreed that higher education is doing a better job than it was doing five to six years ago in the quality of personnel being graduated. A number of higher education institutions are reportedly engaged in processes of self-study and program modification to meet new needs. There is also a widespread perception that higher education is expected to provide training to special education trainees in an increasing array of skills and knowledge, and that the continuing addition of new areas into the curriculum crowds out the capacity to train students well in the essentials.

Specific weaknesses in preservice programming repeatedly voiced by respondents in this survey centered on: the rate at which higher education is able to adapt to state and federal mandates and the needs of the local marketplace; trainee weaknesses in group processes, communication, and teaming skills; the adequacy of the practicum experience; and the need for higher education to prepare personnel specifically for service in diverse geographic, cultural, and socioeconomic settings.

Mandates, Money, and the Supply of Personnel

All jurisdictions included in this study receive federal funds (Part B) to be applied directly to educational services for handicapped students (except for one jurisdiction, which has elected to provide education for the handicapped apart from the provisions of Public Law 94-142). Agencies, districts, colleges, universities, and nonprofit organizations within each jurisdiction

are also eligible to apply for personnel preparation funds under the federal Handicapped Personnel Preparation Program (Part D). Many jurisdictions have little or no state money to support the Comprehensive System of Personnel Development, inservice training, retraining, or any form of professional development. Virtually all reported reductions, cancellations, and other damages to planned training programs due to the fluctuations that occurred in the federal Handicapped Personnel Preparation Program funds in 1981, and due to the changes in funding priorities at the federal level.

Against a background of uncertainty regarding future federal policy, state policy emerges as more crucial to the preparation of personnel for education of the handicapped. Of the 54 jurisdictions surveyed, 22 reported that state or territorial statutes or regulations contained no language pertaining to inservice training, professional development, the Comprehensive System of Personnel Development, or other recognition of the need for the preparation and continued training of personnel for special education. Jurisdictions hit hardest by the recession may have mandates for professional development but have lost the legislative allocation for the activities.

Spokespersons for virtually all jurisdictions emphasized the extreme importance of the federal Part D personnel preparation regulations as a needed sanction for state and local personnel development work. Among jurisdictions with stronger statutory language on personnel development, many spokespersons believed that the loss or weakening of the Part D regulations and training funds would have a profoundly negative effect on continuing state support for personnel preparation and development, given the dire fiscal situation in which many jurisdictions have lately been operating. Those jurisdictions that lack statutory language generally agreed that the loss of the federal mandate for personnel preparation would be catastrophic for these efforts at the state and local level.

Although many jurisdictions had laws pertaining to the education of the handicapped prior to the enactment of Public Law 94-142, these statutes generally delineated services for children and youth, but neglected to establish provisions for systems of personnel development. These provisions are a legacy of Public Law 94-142, which has provided the strength for activities in preservice and inservice training. The majority of respondents believed that a major impact, if not the major impact, of the Law has been its value as an enabling factor in the preparation of personnel and in comprehensive planning for personnel development. It is also evident, however, that the federal Handicapped

Personnel Preparation Grant Program is not, at its current level of funding, sufficient to support large-scale solutions to the complex problems of manpower supply and demand. Clearly, we are not going to get educational excellence on the cheap.

If we choose to continue defining manpower demand in terms of the number of vacancies filled, or by unfilled positions for which the student population is already identified and enrolled, then we will be choosing to maintain the status quo that has been described by respondents in this study, and which represents in many instances the mediocrity with which public education is being charged.

If, instead, we choose to define manpower demand according to the level and quality of services that a school district should maintain in order to provide full educational opportunities for all children, then we will be opting for the excellence that is sought. If excellence is to be the option, the evidence of this study supports the need for additional new, qualified personnel (through preservice preparation) and the need for improving the quality of practicing personnel (through inservice training), as well as the need to improve the efficiency and demonstrated effectiveness of all forms of personnel preparation.

If the quality of instruction and services depends on the skills, knowledge, understandings, and sensitivities of the people who deliver instruction and services, then an adequate supply of fully qualified personnel is paramount in the achievement of excellence. The task at hand is to reinforce this fact to local, state, and federal policy makers—and to the personnel themselves.

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Kansas
Kentucky
Michigan
Mississippi
New York
North Carolina
North Dakota
Ohio
Oregon
Puerto Rico
South Carolina
West Virginia
Wisconsin